

aiwa

Compact Disc Stereo System

XR-M919

(XR-M919MDT, XR-M919MD, XR-M919T)

Stereo Cassette Deck
FX-LM918

Mini Disc Recorder
AM-LM918

EZ

8B-CE1-906-01
010320AYK-H-M



MDLP



— OPERATING INSTRUCTIONS

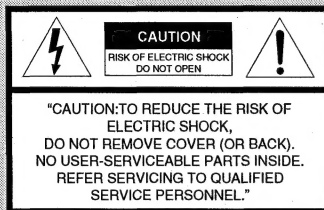
En (English)

PRECAUTIONS

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WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

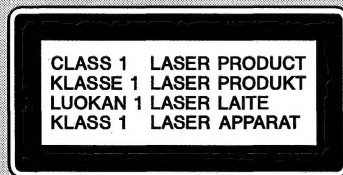


CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This compact disc player is classified as a CLASS 1 LASER product.

The CLASS 1 LASER PRODUCT label is located on the exterior.



CAUTION!



Invisible laser radiation when open and interlocks defeated. Avoid exposure to beam.

Read these Operating Instructions carefully and completely before operating the unit. All precautions in this booklet and on the unit should be strictly followed.

Keep the Operating Instructions for future reference.

Installation

1 Water and moisture — Do not use this unit near water, such as near a bathtub, washbowl, swimming pool, or the like.

2 Heat — Do not use this unit near sources of heat, including heating vents, stoves, or other appliances that generate heat. It also should not be placed in temperatures less than 5°C or greater than 35°C.

3 Mounting surface — Place the unit on a flat, even surface.

4 Ventilation — The unit should be situated with adequate space around it so that proper heat ventilation is assured. Allow 10 cm clearance from the rear and the top of the unit, and 5 cm from each side.

- Do not place the unit on a bed, rug, or similar surface that may block the ventilation openings.
- Do not install the unit in a bookcase, cabinet, or airtight rack where ventilation may be impeded.

5 Objects and liquid entry — Make sure that objects or liquids do not get inside the unit through the ventilation openings.

6 Carts and stands — When placed or mounted on a stand or cart, the unit should be moved with care.

Quick stops, excessive force, and uneven surfaces may cause the unit or cart to overturn or fall.

7 Condensation — Moisture may form on the CD pickup lens when.

- The unit is moved from a cold spot to a warm spot
- The heating system has just been turned on
- The unit is used in a very humid room
- The unit is cooled by an air conditioner

When this unit has condensation inside, it may not function normally. Should this occur, leave the unit for a few hours, then try to operate again.

8 Wall or ceiling mounting — The unit should not be mounted on a wall or ceiling, unless specified in the Operating Instructions.

Electric Power

1 Power sources — Connect this unit only to power sources specified in the Operating Instructions, and as marked on the unit.

2 AC power cord

- When disconnecting the AC power cord, pull it out by the AC power plug. Do not pull the cord itself.
- Never handle the AC power plug with wet hands, as this could result in fire or shock.
- Power cords should be firmly secured to avoid being severely bent, pinched, or walked upon. Pay particular attention to the cord from the unit to the power socket.
- Avoid overloading AC power sockets and extension cords beyond their capacity, as this could result in fire or shock.

3 When not in use — Unplug the AC power cord from the AC power socket if the unit will not be used for several months or more. When the cord is plugged in, a small amount of current continues to flow to the unit, even when the power is turned off.

Maintenance

Clean the unit only as recommended in the Operating Instructions.

Damage Requiring Service

Have the unit serviced by a qualified service technician if:

- The AC power cord or plug has been damaged
 - Foreign objects or liquid have got inside the unit
 - The unit has been exposed to rain or water
 - The unit does not seem to operate normally
 - The unit exhibits a marked change in performance
 - The unit has been dropped, or the cabinet has been damaged
- DO NOT ATTEMPT TO SERVICE THE UNIT YOURSELF.

System and accessories

TX-LM919 Stereo Tuner
MX-LM919 Stereo Integrated Amplifier
DX-LM918 Compact Disc Player
SX-LM918 Speakers

Remote control
Lithium battery (CR2025)
FM antenna
MW/LW antenna

Optional units

FX-LM918 Stereo Cassette Deck
AM-LM918 Mini Disc Recorder

Other sets available

The following sets, consisting of different types of units, are also available.

Set name : XR-M919MDT

Consists of:

TX-LM919 Stereo Tuner
MX-LM919 Stereo Integrated Amplifier
DX-LM918 Compact Disc Player
FX-LM918 Stereo Cassette Deck
AM-LM918 Mini Disc Recorder

Set name : XR-M919MD

Consists of:

TX-LM919 Stereo Tuner
MX-LM919 Stereo Integrated Amplifier
DX-LM918 Compact Disc Player
AM-LM918 Mini Disc Recorder

Set name : XR-M919T

Consists of:

TX-LM919 Stereo Tuner
MX-LM919 Stereo Integrated Amplifier
DX-LM918 Compact Disc Player
FX-LM918 Stereo Cassette Deck

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PREPARATIONS

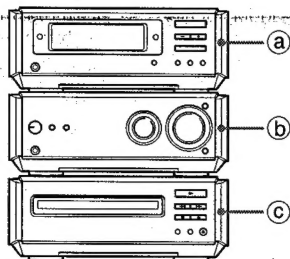
Recommended positioning

The XR-M919 Compact Disc Stereo System is designed to be operated by placing each unit as illustrated below:

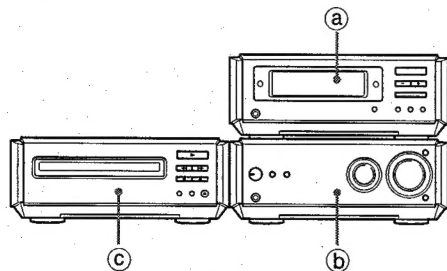
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- ① Stereo Tuner
- ② Stereo Integrated Amplifier
- ③ Compact Disc Player
- ④ Optional Stereo Cassette Deck or Mini Disc Recorder

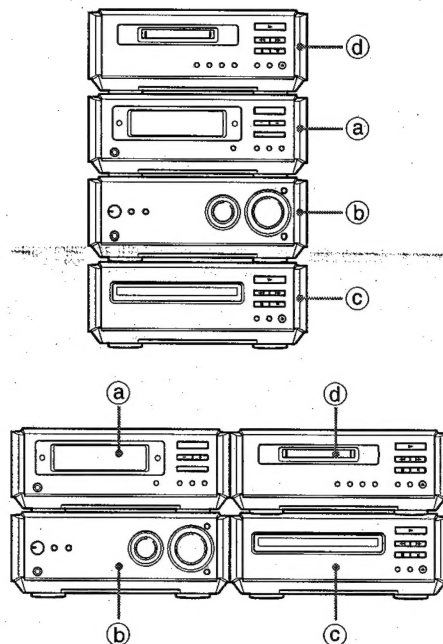
Placing three units vertically



Placing the Compact Disc Player at the side of the Stereo Integrated Amplifier



When the optional units are added



Connection

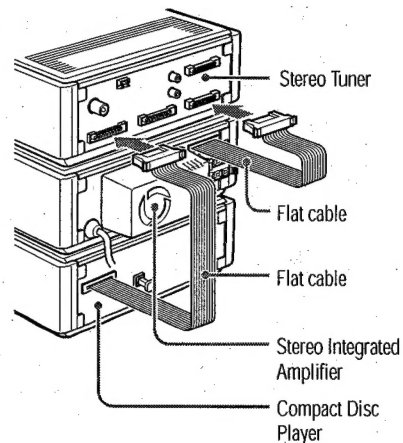
Plug in the AC power cord to the AC power socket after all other connections are made.

Note

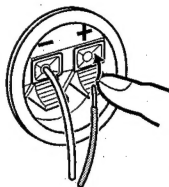
When placing the Compact Disc Player at the side of the Stereo Integrated Amplifier, make sure that the flat cable does not obstruct the ventilation openings at the rear of the Stereo Integrated Amplifier.

- 1 Connect the Stereo Integrated Amplifier and the Compact Disc Player to the Stereo Tuner.

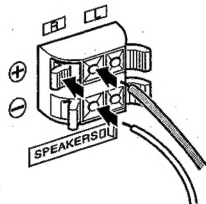
Connect the flat cable of the Stereo Integrated Amplifier to the FROM AMP terminal, and connect the flat cable of the Compact Disc Player to the FROM CD terminal.



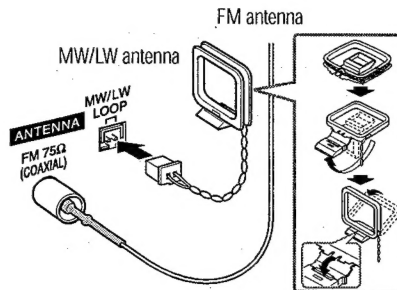
- 2 Connect the speaker cords to the speakers. Connect the amber cords to the \oplus terminals and the silver cords to the \ominus terminals.



- 3 Connect the speaker cords to the Stereo Integrated Amplifier. Connect the right speaker to the SPEAKERS R terminals and the left to the SPEAKERS L terminals. The amber speaker cords go to the \oplus terminals.



- 4 Connect the supplied antennas to the Stereo Tuner. Connect the FM antenna to the FM 75 Ω terminal and the MW/LW antenna to the MW/LW LOOP jack.



- 5 Connect the AC power cord to an AC power socket. When the AC power cord is connected to an AC power socket for the first time, DEMO appears on the display. To deactivate the DEMO, press DEMO on the Stereo Tuner, and the clock will flash on the display. For setting the clock, see page 10.

Speakers

- Do not short-circuit the \oplus and \ominus speaker cord leads.
- Do not leave objects generating magnetism or objects affected by magnetism near the speakers.

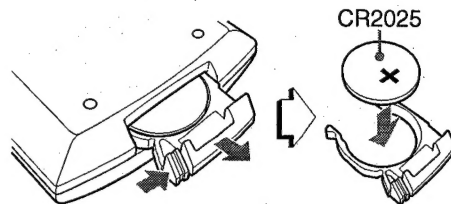
Antennas

Keep antennas away from metallic objects, electrical equipment and cords.

- **FM antenna:** Extend fully and position for the best reception. If reception is poor, connect an optional outdoor antenna to the FM 75 Ω terminal.
- **MW/LW antenna:** Rotate to find the best reception.

Remote control

While sliding the latch, pull out the battery holder from the bottom of the remote control. Place the supplied battery on the battery holder with correct polarity. Finally, insert the holder back into position.



- Replace the batteries with a new one when the operational distance between the remote control and main units becomes shorter.
- Remove the battery if the remote control is not going to be used for an extended period of time.
- The remote control may not operate if it is used under intense sunlight, etc., or if its line of sight is obstructed.

Caution!

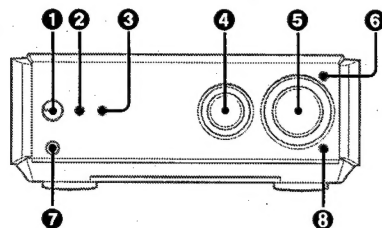
- Do not keep the battery near metallic objects such as rings, bracelets, and keys. It may cause the battery to short circuit.
- After removing the battery, be sure to keep it out of reach of children. In case it is swallowed, consult a doctor immediately.



PARTS AND CONTROLS

Stereo Integrated Amplifier

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1 POWER \odot STANDBY/ON

Switches the system on and off (standby).

2 ECO

Turns the ECO mode on and off.

3 QSURROUND

Turns QSURROUND on and off.

4 FUNCTION

Switches the active function.

5 VOLUME/MULTI JOG

Adjusts the volume.

When used in combination with JOG MODE, determines various sound modes, etc.

6 ENTER/ILLUMINATION

Determines the mode.

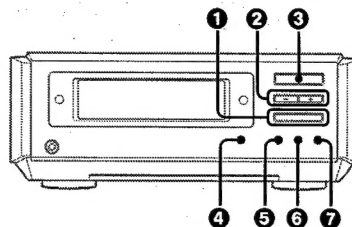
Turns the illumination lights on and off.

7 PHONES jack

Plug in optional headphones set with a stereo mini plug ($\phi 3.5$ mm). Speaker output is cancelled.

8 JOG MODE

Stereo Tuner



1 BAND

Selects the band; FM, MW or LW.

2 TUNING DOWN/–, +/UP

Tunes up or down within the band.

3 PRESET

Tunes in a preset station.

4 DISPLAY

CD: displays the track number being played and elapsed playing time, and remaining time of play.

5 DEMO/RDS

Activates the DEMO.

Tuner: Activates RDS features.

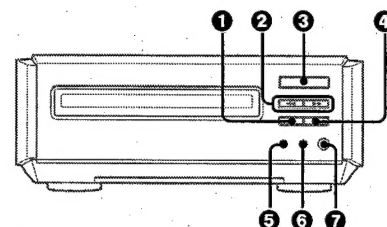
6 CLEAR

Clears a preset station.

7 SET

Stores the received station to preset.

Compact Disc Player



1 \parallel PAUSE

Pauses play.

2 $\lll/\lll, \ggg/\ggg$ SKIP/SEARCH

Skips to a previous or a succeeding track when pressed, searches for a particular point in fast forward or reverse play when held down.

3 \blacktriangleright PLAY

Starts play.

4 \blacksquare STOP

Stops play.

5 PROGRAM

Selects programmed CD play mode.

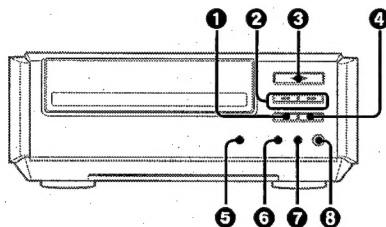
6 REPEAT

Selects repeat CD play mode.

7 \triangle OPEN/CLOSE

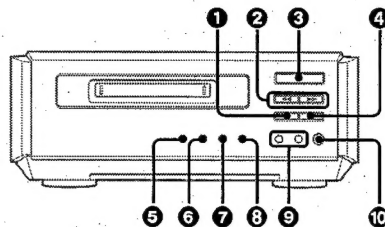
Opens and closes the disc tray.

Stereo Cassette Deck (option)



- 1 II PAUSE**
Pauses playback.
- 2 <<I, >>I**
Rewinds or fast forwards the tape.
- 3 <> PLAY/DIR**
Starts playback and changes the playback side.
- 4 ■ STOP**
Stops playback.
- 5 REV MODE**
Selects a reverse mode.
- 6 SYNC REC**
Starts recording and CD play simultaneously.
- 7 REC**
Starts recording.
- 8 ▲ OPEN/CLOSE**
Opens and closes the tape tray.

Mini Disc Recorder (option)

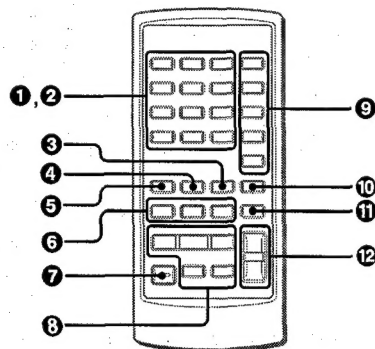


- 1 II PAUSE**
Pauses play.
- 2 <<I/ >>I/ >>> SKIP/SEARCH**
Skips to a previous or a succeeding track when pressed, searches for a particular point in fast forward or reverse play when held down.
- 3 ► PLAY**
Starts play.
- 4 ■ STOP**
Stops play.
- 5 GROUP DIRECT**
Enters the group selection mode.
- 6 MD MODE**
MD recording: selects auto group mode and mark mode.
MD editing: registers title.
- 7 REC MODE**
Selects recording mode; monaural or stereo, LP2 or LP4.

- 8 MD EDIT/REC**
Selects MD editing mode.
Starts recording on an MD through analogue sound inputs.
- 9 CD ► MD SYNC REC (DIGITAL)**
HIGH
Starts digital recording of a CD onto an MD at double speed.
NORMAL
Starts digital recording of a CD onto an MD at normal speed.
- 10 ▲ EJECT**
Ejects the disc.

En

Remote control



Buttons with the same or similar names on the main unit basically have the same function.

① 0-10, +10

CD: selects a track of the specified number.
Radio: tunes in the station with the specified preset number.

② CD EDIT/CHECK/1

Selects edited CD recording.

RANDOM/REPEAT/2/ABC

Selects random or repeat CD play mode.

PROGRAM/3/DEF

Selects programmed CD play mode.

DISPLAY/4/GHI

CD: displays the track number being played and elapsed playing time, and remaining time of play.

TIMER/5/JKL

Selects timer playback setting mode.

SLEEP/6/MNO

Selects sleep timer setting mode.

CLOCK/7/PQRS

Selects clock setting mode.

TUNER MONO/8/TUV

Switches between stereo or monaural FM reception.

9/WXYZ

MD EDIT

Selects MD editing mode.

MD MODE

MD recording: selects auto group mode and mark mode.
MD editing: registers title.

③ EQ/SURROUND

④ T-BASS

⑤ SHIFT

Hold down when pressing a button to change its function to that printed above the button.

⑥ MD REC (ANALOG)

Selects the recording mode for analogue recording.

REC MODE (DIGITAL)

Selects the recording mode for MD digital recording.



Starts analogue recording.

⑦ POWER

⑧ ►PRESET

◀◀/◀, ▶/▶▶ TUNING DOWN/UP

||SET

■CLEAR

⑨ TAPE/REV MODE

Selects tape function and the reverse mode, when the FX-LM918 optional Stereo Cassette Deck is connected.

TUNER/BAND

Selects radio function and the radio band.

AUX/D-IN

Selects the function of external equipment connected to the AUX IN jacks (on the rear of the Stereo Tuner) or to the AUX DIGITAL IN jack (on the rear of the AM-LM918 optional Mini Disc Recorder).

CD

Selects CD function.

MD/GROUP MODE

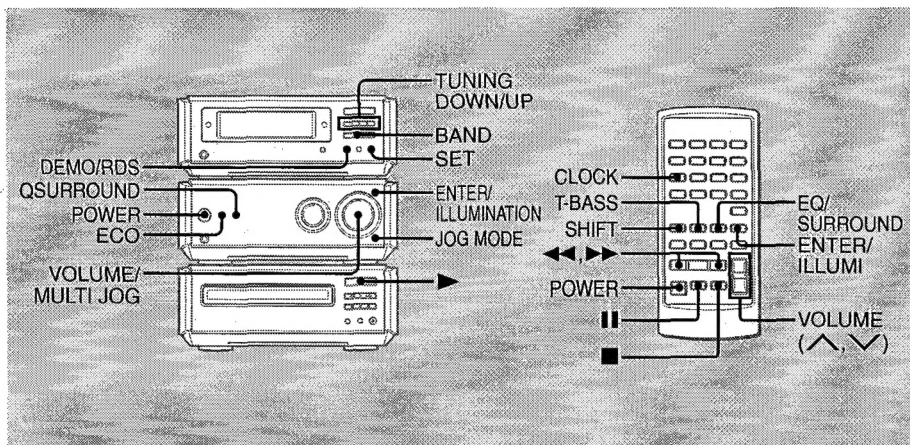
Selects MD function. Also selects the group mode.

⑩ ENTER/ILLUMI

⑪ GROUP (DIRECT)

⑫ VOLUME (▲▼)

ADJUSTMENTS BEFORE OPERATION



Power

Turning the system on

Press POWER STANDBY/ON (POWER on the remote control).

Alternatively, press BAND on the Stereo Tuner or on the Compact Disc Player. Playback will start automatically if a disc is loaded.

Turning the system off

Press POWER STANDBY/ON again. The system goes into standby.

Volume

Turn VOLUME/MULTI JOG (VOL) on the remote control).

Adjust from 0 (minimum) to 30 and MAX (maximum).

Tip:

Volume level setting is retained during power-off standby. If the system is turned off with the volume set to 22 or more, it is automatically turned down to 21 the next time the system is turned on.

DEMO

If the clock has not been set, a DEMO appears on the display when the system is turned off.

To deactivate the DEMO

Press DEMO/RDS. The clock flashes. For setting the clock, see page 10.

ECO mode

The system allows you to regulate its power consumption by displaying nothing on the display while the power is off. This is called the power economizing mode.

- 1 Turn the system on.
- 2 Press ECO repeatedly to turn on or off the ECO mode.
"ECO ON": to turn on the ECO mode
"ECO OFF": to turn off the ECO mode
Alternatively, turn VOLUME/MULTI JOG to turn on or off the ECO mode.
- 3 Press ENTER/ILLUMINATION.

When the power economizing mode is activated

Each time the system is turned off, "Eco Mode" is displayed for 4 seconds, and everything on the display will clear. Only the red indicator on the POWER button lights to show that power is being supplied to the system.

Standby power consumption

When the power economizing mode is activated: 1.7W
When the power economizing mode is deactivated: 12 W

Backlight

You can turn on or off the backlight of the display.

While the power is turned off with the ECO mode deactivated, press ENTER/ILLUMINATION. Each press of the button turns on and off the backlight of the display.

En

Illumination

The system allows you to turn on and off the blue illumination of each unit.

Press ENTER/ILLUMINATION (ENTER/ILLUMI) on the remote control while the system is turned on.
Each press of the button turns on and off the illumination.

Note

Pressing ENTER/ILLUMINATION (ENTER/ILLUMI) during MD recording* will not turn on/off the illumination but record an index mark on the MD.

* Possible only when the AM-LM918 optional Mini Disc Recorder is connected.

Setting the clock

- 1 Turn the system off.
- 2 Press one of the following buttons:
 - SET on the Stereo Tuner
 - ENTER/ILLUMINATION on the Stereo Integrated Amplifier
 - **II** on the remote control
 Alternatively, hold down SHIFT and press CLOCK on the remote control.
- 3 Within 4 seconds, press TUNING UP or DOWN on the Stereo Tuner to set the time.
Each press changes the time in 1-minute steps.
Holding these buttons down will vary the time in 10-minute units.
 - You can use **◀◀** or **▶▶** on the remote control instead of TUNING UP/DOWN.
 - You can also turn VOLUME/MULTI JOG to the right to advance the time and to the left to move the time back. The speed with which the time changes varies according to how fast you turn VOLUME/MULTI JOG.
- 4 Press one of the following buttons:
 - SET on the Stereo Tuner
 - ENTER/ILLUMINATION on the Stereo Integrated Amplifier
 - **II** on the remote control

To display the time while the power is on

Hold down SHIFT and press CLOCK on the remote control. The time will be displayed for 4 seconds, but it cannot be displayed during recording.

To switch to the 24-hour standard

While the time is displayed, press **■**.
With each press, the clock alternates between the 12- and 24-hour standard time.

Tip:

In the 12-hour standard, "AM 12:00" indicates midnight and "PM 12:00" noon.

If the DEMO appears when the unit is turned off

There has been a power interruption. Reset the clock.

SOUND ADJUSTMENTS

Graphic equalizer

Selects a sound equalization curve to match the music type.

Press JOG MODE on the Stereo Integrated Amplifier repeatedly so that "EQ OFF" (or one of the equalization curves) appears, and turn VOLUME/MULTI JOG to select the desired equalization curve.

- ROCK: Powerful sound emphasizing treble and bass
- POP: More presence in the vocals and midrange
- JAZZ: Accented lower frequencies for jazz-type music

When using the remote control, press EQ repeatedly.

To cancel equalization

Select "EQ OFF" in the above procedure.

BBE

Enhances high frequencies for sound clarity.

Press JOG MODE on the Stereo Integrated Amplifier repeatedly so that "BBE" appears, and turn VOLUME/MULTI JOG to select one of the three enhancement levels or the off position.

- If the sound becomes distorted with the BBE effect, cancel the effect.

T-BASS

Emphasizes low frequencies for a powerful sound.

Press JOG MODE on the Stereo Integrated Amplifier repeatedly so that "T-BASS" appears, and turn VOLUME/MULTI JOG to select one of the three enhancement levels or the off position. When using the remote control, press T-BASS repeatedly.

- If the sound becomes distorted with the T-BASS effect, cancel the effect.

Q SURROUND system

The Q SURROUND system built into this system uses only two speakers at the left and right to create an atmosphere that sounds as if you are surrounded by two front speakers and two rear speakers.

Press QSURROUND on the Stereo Integrated Amplifier. "ON QSURROUND" runs through the display, and the Q SURROUND system is activated. The QSURROUND indicator also lights up.

When using the remote control, hold down SHIFT and press SURROUND.

To cancel the Q SURROUND effect

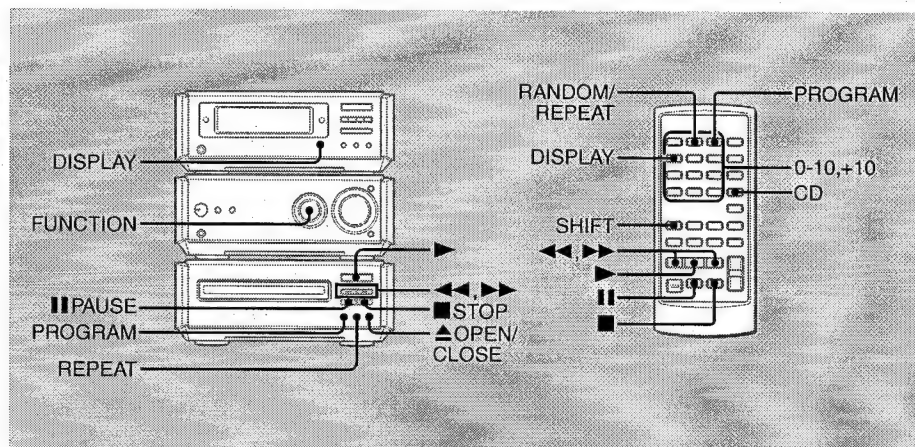
Press QSURROUND again. "OFF QSURROUND" runs through the display. The QSURROUND indicator goes off.

Tip:

- The Q SURROUND system does not work in monaural mode.
- When the Q SURROUND system is on, the sound may be distorted at higher volumes. If this happens, turn the volume down.

CD OPERATIONS

En



This system plays back finalized CD-R/RW discs as well as audio CDs.

Playback

- 1 Turn FUNCTION on the Stereo Integrated Amplifier to select the CD function.
Alternatively, press CD on the remote control.
- 2 Press **▲ OPEN/CLOSE** on the Compact Disc Player to open the disc compartment.
Place a disc with the label side up. Then close the disc tray by pressing **▲ OPEN/CLOSE**.
- 3 Press **▶** to start play.

To stop playback

Press **■**.

To pause playback

Press **||**. Press again to resume playback.

To skip to the beginning of the current/preceding/succeeding track

Press **◀◀** or **▶▶** repeatedly.

To search (playback in fast forward or reverse)

Hold down **◀◀** or **▶▶**. Release at the desired point.

To select a track with the remote control (Direct play)

Press the numbered buttons to select a track.

- To select the 25th track, press +10, +10 and 5.
- To select the 20th track, press +10, +10 and 0.

To change the display in play mode

Press DISPLAY (hold down SHIFT and press DISPLAY on the remote control) during play.

Each time the button is pressed, the track number being played and elapsed playing time or the remaining time of play is displayed.

Random/Repeat play

Random play mode plays all the tracks in random order. Repeat play mode plays all the tracks or the track being played repeatedly.

You can select random and repeat all play at the same time.

Random play

- 1 Hold down SHIFT and press RANDOM/REPEAT on the remote control repeatedly until "RANDOM" is displayed.
- 2 Press **▶** to start play.

To cancel, hold down SHIFT and press RANDOM/REPEAT repeatedly so that "RANDOM" disappears.

- Direct selection of the tracks with the numbered buttons cancels the random play mode.

Repeat play

Press REPEAT repeatedly to select "↺" (repeat all tracks) or "↺1" (repeat one track).

Alternatively, hold down SHIFT and press RANDOM/REPEAT repeatedly on the remote control.

To cancel, press REPEAT repeatedly (or hold down SHIFT and press RANDOM/REPEAT repeatedly on the remote control) so that the repeat indicator goes off.

To repeat a selected set of tracks

Select the tracks with programmed play, then press REPEAT on the remote control to select repeat play.
(See "Programmed play" on page 13.)

Programmed play

Plays back up to 30 selected tracks in programmed order.

- 1 Press PROGRAM on the Compact Disc Player, or hold down SHIFT and press PROGRAM on the remote control in stop mode.
"PRGM" flashes on the display.

- 2 Press the numbered buttons on the remote control to program a track.
 - To select the 25th track, press +10, +10 and 5.
 - To select the 20th track, press +10, +10 and 0.The selected track number lights up on the display.

- 3 Repeat step 2 to program other tracks.
The total number of selected tracks and total playing time will be displayed.

- 4 Press ►.
The track number for the current track flashes on the display.

- During programmed playback, you cannot select "◀▶" play or random play.
- select a track with the numbered buttons.
- If the total play time of the program exceeds 99 minutes and 59 seconds, or if a track with a track number exceeding 30 is programmed, the playing time is displayed as "- : - : -".

To check the program

Press ◀◀ or ▶▶ repeatedly in stop mode. The track number and program number are displayed in succession.

To clear the program

Press ■ in stop mode.

To add tracks to the program

Repeat step 2 before starting play. The tracks are added to the end of the program.

To change the programmed tracks

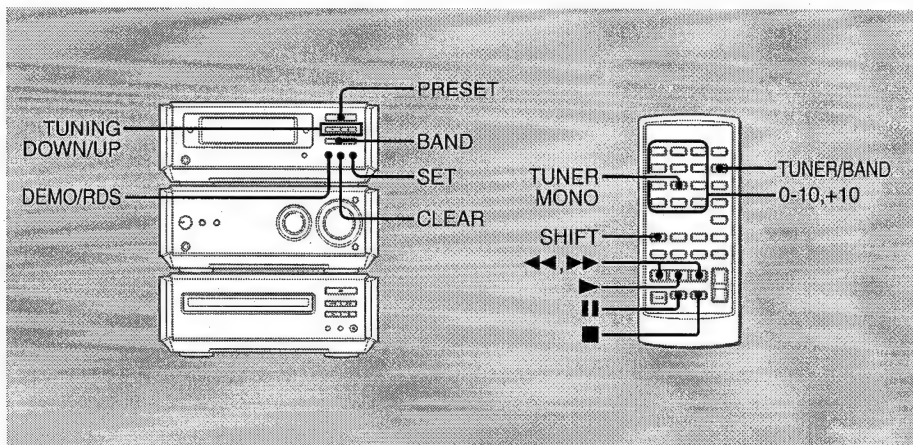
Clear the program and repeat all the steps again.

Notes on CDs

- Do not place more than one disc.
- Do not tilt the Compact Disc Player with a disc loaded.
- The system may not play CD-R/RW discs recorded on personal computers or certain kinds of CD-R/RW recorders.
- Do not attach adhesive label, etc. to either side of CD-R/RW discs, as doing so may cause malfunction.
- Do not load an unrecorded CD-R/RW disc. The disc may be damaged.
- Do not use irregular-shaped CDs.

RADIO OPERATIONS

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Automatic presetting

Scans the receivable frequency range and stores tuned stations automatically with the preset number.

- 1 Press BAND (TUNER/BAND).
 - 2 Hold down DEMO/RDS for 4 seconds until "AUTO PRESET" runs through the display.
 - 3 Within 4 seconds press SET.
The tuning indicator is displayed and scanning begins with the FM band.
The frequency and the preset number (beginning from 1) will be displayed when a tuned station is stored.
The display will return to the first stored station when scanning is finished.
- The system scans the MW and LW bands if preset numbers are still available.
 - Automatic presetting clears all the previously stored preset stations.
 - If identical RDS stations with alternative frequencies are detected, only the station with the stronger signal is stored.

Manual tuning

- 1 Press BAND (TUNER/BAND on the remote control) repeatedly to select a band.
The system switches to the radio from any other function and alternates between FM, MW and LW.
- 2 Press TUNING UP or DOWN (◀◀ or ▶▶ on the remote control) repeatedly to tune in a station.
"TUNE" is displayed when a station is tuned in.
(((◉))) is displayed for FM stereo reception.

To search for a station automatically (Auto search)

Hold down TUNING UP or DOWN (◀◀ or ▶▶).

The unit searches for a station and stops at reception.

To stop the search manually, press TUNING UP or DOWN (◀◀ or ▶▶).

- Auto search may not stop at stations with weak signals.

Preset tuning

Preset your favourite stations by either of the following ways ("Manual presetting" or "Automatic presetting") and tune them in directly by using number.

Manual presetting

- 1 Tune in the desired station.
 - 2 Press SET to store the station.
The preset number, beginning from "1" flashes on the display.
 - 3 Repeat steps 1 and 2 to preset other stations.
- The system can store a total of 32 preset stations.
 - If power is interrupted for more than approximately 12 hours, all settings stored in memory after purchase need to be reset.

Tuning in preset stations

- 1 Select the band.
- 2 Press PRESET (▶ on the remote control) repeatedly.
With each press, the station with the succeeding preset number is tuned in.
You can tune in the desired preset station directly by pressing the numbered buttons on the remote control.
 - To select preset number 10, press 10.
 - To select preset number 15, press +10 and 5.

To clear a preset station

- 1 Tune in the station by preset tuning.
- 2 Press CLEAR (■ on the remote control), then press SET (■ on the remote control) within 4 seconds.
Preset station numbers in the band which are higher than the cleared number decrease by one.

RDS features

RDS (Radio Data System) is a broadcasting service which allows FM stations to send additional information along with the regular radio signal.

The additional information is derived from the features of RDS described below.

Program Service station name (PS)

The station name is displayed automatically when an RDS station is tuned in.

Radio Text (RT)

You can show text information such as the title of a song on the display.

Press DEMO/RDS repeatedly until "RT" flashes on the display.

If the tuned station is not transmitting text information, "RT" does not flash.

To return to the regular display

Press DEMO/RDS repeatedly until the desired display is restored.

Program Type (PTY)

This is an identification to specify the program being broadcast currently.

Press DEMO/RDS repeatedly to display a program type when tuning in to an RDS station.

The program type will be displayed for 10 seconds.

If no PTY data or undefined PTY data is being transmitted, "NO PTY" or "UNDEFINE" will be displayed.

The following PTYs can be received on the unit

*TRAFFIC, NEWS, AFFAIRS, INFO, SPORT, EDUCATE, DRAMA, CULTURE, SCIENCE, VARIED, POP M, ROCK M, EASY M (easy listening music), LIGHT M (light classical music), CLASSICS, OTHER M (other music), WEATHER, FINANCE, CHILDREN (children's program), SOCIAL (social affairs), RELIGION, PHONE IN, TRAVEL, LEISURE, JAZZ, COUNTRY (country music), NATION M (national music), OLDIES, FOLK M, DOCUMENT, TEST (alarm test), ALARM.

*The system identifies TRAFFIC with one of the PTYs.

PTY Search

The unit can search for a station broadcasting your desired PTY easily. To do so, you need to preset every available station in advance since the system searches only the preset stations.

- 1 Press DEMO/RDS repeatedly until the program type of the currently tuned station is displayed.
- 2 Press TUNING UP or DOWN (◀◀ or ▶▶) or turn VOLUME/MULTI JOG to select a desired program type and then press PRESET.
The search begins, stops when a suitable station is detected, and the system tunes it in.
"NOT FOUND" is displayed if a suitable station is not found, and the system returns to the previous station.
If there is no button input for 10 seconds in step 2, the search is not activated.

Tip:

If TRAFFIC is selected, the system searches for a station which regularly broadcasts traffic announcements. Therefore, a detected station may not be currently broadcasting traffic announcements. You will, however, be able to hear the announcements in a while.

EON Search

The system can leap to a station which has just started broadcasting your desired PTY.

In EON (Enhanced Other Networks information) Search, the system is in standby mode until the desired PTY begins. As soon as it begins, the system "leaps to" another station with the PTY and returns to the previously tuned station when it ends. EON Search makes the function above possible with the help of EON which gives the receivers a cross reference to other stations. You need to preset every available station in advance since the system searches only the preset stations.

- 1 Press DEMO/RDS repeatedly until the program type of the currently tuned station is displayed.
- 2 Press TUNING UP or DOWN or turn VOLUME/MULTI JOG to select a program type.
If TUNING UP or DOWN is not pressed within 10 seconds, the EON search will be cancelled.
- 3 Press SET.
If SET is not pressed within 10 seconds, the EON search will be cancelled.
"EON ON" is displayed for 3 seconds and then the system enters the standby mode while "EON" flashes. When the system leaps to another station, "EON" flashes rapidly.

To return to the previously tuned station from the "leaped to" station

Press CLEAR (■). The standby mode for EON Search is also cancelled.

To cancel the standby mode for EON Search

Press DEMO/RDS repeatedly so that the program type display appears. Press CLEAR (■) and then press SET (■).

- The standby mode for EON Search will not be cancelled even if the system is turned off.

Note on PTY & EON Search

PTY & EON Search do not function under the following conditions:

- FM stations are not preset.
- The signals of the station broadcasting the desired PTY are weak.
- FM RDS stations cannot be received.

Clock-time (CT)

You can automatically set and update the clock on the hour every hour just by tuning in an RDS station since RDS stations transmit clock signals.

- 1 Press DEMO/RDS repeatedly to select "CT ON" while the system is on and the time is displayed (see "Setting the clock").
- 2 Tune in an RDS station.

To deactivate CT function (If the clock is set wrongly due to an incorrect clock signal)

An RDS signal will update the clock time on the hour every hour.

Note on RDS Features

The RDS features described above may not function correctly if the RDS transmission data from the station contains too much interference or the reception signal is too weak.

Adjustments

To switch to monaural FM reception

Hold down SHIFT and press TUNER MONO on the remote control so that "TUNER MONO" is displayed.

To cancel, press again to display "Auto STEREO".

Tip:

When FM stereo reception is poor, switching to monaural reduces noise.

To switch the MW tuning interval

The default setting of the MW tuning interval is 9 kHz/step. If you use this system in an area where the frequency allocation system is 10 kHz/step, change the tuning interval. Hold down BAND and press POWER.

Tip:

When the MW tuning interval is changed, all preset stations are cleared.

TAPE PLAYBACK (with the optional Stereo Cassette Deck)

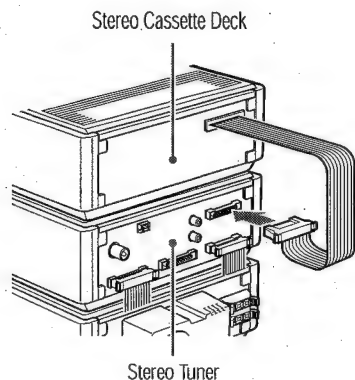
Connection

Caution

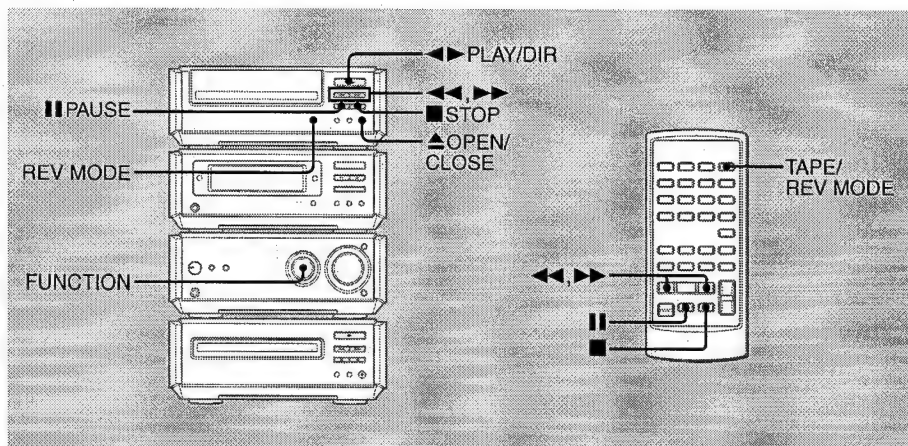
Before connecting the Stereo Cassette Deck, disconnect the AC power cord from the AC power socket.

After making connection, re-connect the AC power cord.

Connect the Stereo Cassette Deck's flat cable to the FROM DECK terminal on the Stereo Tuner.



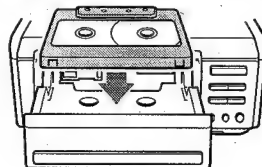
If you also use the optional Mini Disc Recorder, it is recommended that you place the Mini Disc Recorder on top of the Stereo Tuner, then place the Stereo Cassette Deck on top of the Mini Disc Recorder.



Playback

Use type I (normal), type II (high/CrO₂) or type IV (metal) tapes for playback.

- 1 Turn FUNCTION on the Stereo Integrated Amplifier to select the TAPE function. Alternatively, press TAPE/REV MODE on the remote control.
- 2 Press ▲OPEN/CLOSE to open the tape tray.
- 3 Insert the tape. Insert with the exposed side facing forward, and press ▲OPEN/CLOSE to close the tape tray.



- 4 Press ◀▶ to start play.

To select a reverse mode

Press REV MODE (TAPE/REV MODE on the remote control) repeatedly.

- To play one side only, select Ⅰ.
- To play from the side facing upward to the opposite side once only, select Ⅱ.
- To play both sides repeatedly, select Ⅲ.

To stop playback

Press ■.

To pause playback

Press ||. Press again to resume.

To change the playback side

Press ◀▶ in playback or pause mode.

To rewind or fast forward

Press ◀◀ or ▶▶.

To reset the tape counter

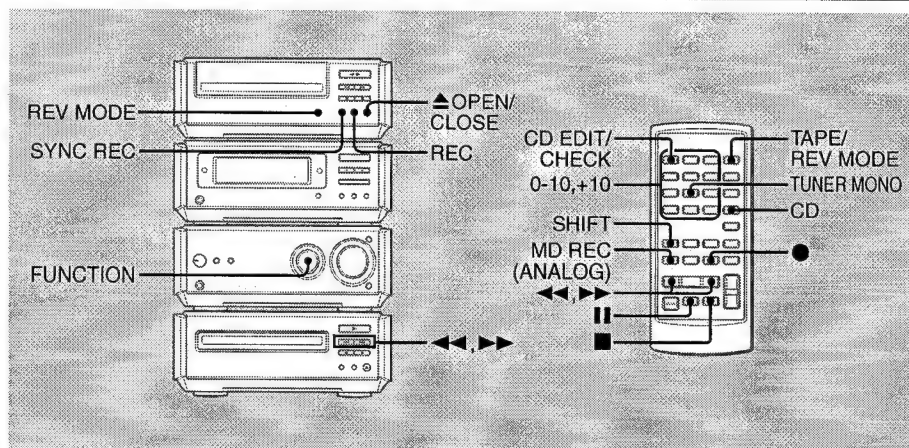
Press **■** in stop mode, and the tape counter on the display is reset to "0000".

Opening and closing the tape tray will also reset the tape counter.

Notes on cassettes

- Use of 120-minute or longer tapes is not recommended since they are extremely thin and easily deformed or damaged.
- Wind up any slack in the tape with a pencil or similar tool before use. Slack tape may jam in the mechanism.

TAPE RECORDING (with the optional Stereo Cassette Deck)



Basic recording

Use type I (normal) or type II (high/CrO₂) tapes for recording.

- 1 Press **▲**OPEN/CLOSE to open the tape tray.
- 2 Insert the recording tape.
Insert with the exposed side facing forward, and the side to be recorded on first facing upward. Press **▲**OPEN/CLOSE to close the tape tray.
- 3 Turn **FUNCTION** (or press **TAPE/REV MODE** on the remote control) to select the **TAPE** function.
- 4 Press **REV MODE** (**TAPE/REV MODE** on the remote control) to select the reverse mode.
To record on one side only, select **⏮**.
To record on both sides, select **⏮** or **⏭**.
- 5 Turn **FUNCTION** to select the source to be recorded.

- 6 Prepare the source.

To record **CD**, load a disc.

To record a radio broadcast, tune in the desired station.

To record from connected external equipment, turn **FUNCTION** to select the **AUX** function and prepare the equipment.

- 7 Press **REC** to start recording.
When recording a CD, CD play starts automatically.
When recording input from connected equipment, manually start playback of the source.
- Volume or tone adjustment(s) does not affect recording.

To start CD recording more easily

Insert the tape to be recorded, load the disc, and press **SYNC REC**. Regardless of the function currently selected, CD play and tape recording starts simultaneously.

To start recording with the remote control

When the optional Mini Disc Recorder is not connected, press **●**.

When the optional Mini Disc Recorder is connected, press MD REC (ANALOG) repeatedly to display "TAPE REC", and then press **●**.

To stop recording

Press **■**.

To pause recording (only for TUNER or AUX sources)

Press **■**. Press again to resume.

To record a selected set of tracks from a CD

Program the desired tracks (see "Programmed play") and then press REC.

To record a 4-second blank space (only for TUNER or AUX sources)

Inserting 4-second blank spaces may help you locate the beginning of the track on other equipment.

1 Press REC during recording or in recording pause mode. "TAPE REC" flashes on the display for 4 seconds (a blank space is added) and then the system enters recording pause mode.

2 Press **■** to resume recording.

To record a blank space shorter than 4 seconds, press REC again while "TAPE REC" flashes.

To record a blank space longer than 4 seconds, press REC again after the system enters recording pause mode. Each time the button is pressed, a 4-second blank space is added.

To erase a tape

1 Insert the tape. Set the tape to the desired point if needed.
2 Turn FUNCTION to select the AUX function.

If optional equipment is connected to the AUX jacks, turn it off.

3 Press REC.

Edited CD recording

AI Edit Recording

Preparation

Prepare a tape that is longer than the CD length.

When recording a whole CD, AI Edit Recording takes the length of your tape into account and rearranges the recording order of the tracks if necessary, so that no track is cut short at the end of the side.

(AI: Artificial Intelligence)

•Recording cannot start from a point halfway in the tape.

•AI Edit Recording cannot be used with discs containing more than 30 tracks.

1 Insert the recording tape.

2 Turn FUNCTION (or press CD on the remote control) to select the CD function, and load the disc.

3 Hold down SHIFT and press CD EDIT/CHECK on the remote control in stop mode. "AI C-00" is displayed.

4 Press the numbered buttons on the remote control to enter the length of the recording tape. 10 to 99 minutes can be specified.

- For a 60-minute tape press 6 and 0.

In a few seconds, the system determines the tracks to be recorded for each side.

The recording time left for side A appears on the display.

•◀◀ or ▶▶ on the Compact Disc Player or on the remote control can also be used to specify tape length.

5 Press REC to start recording.

The tape is rewound to the beginning of the side facing upward, the lead segment is played through for 10 seconds, and recording starts.

When recording on the side facing upward (side A) ends, recording on the opposite side (side B) starts.

To stop recording

Press **■** on the Stereo Cassette Deck or on the remote control. Recording and CD play stop simultaneously.

To clear the edit program

Press **■** on the Stereo Cassette Deck or on the remote control twice.

En

Programmed Edit Recording

As you program the CD tracks to record, Programmed Edit Recording displays the remaining recording time for each side of the tape, so you can easily select a set of desired tracks within the length of your tape.

- Recording cannot start from a point halfway in the tape.
- You cannot program more than 30 tracks.
- You cannot program a track with a track number larger than 30.

- 1 Insert the recording tape.
- 2 Turn FUNCTION (or press CD on the remote control) to select the CD function, and load the disc.
- 3 Hold down SHIFT and press CD EDIT/CHECK on the remote control twice in stop mode. "PRGM C-00" is displayed.
- 4 Press the numbered buttons on the remote control to enter the length of the recording tape. 10 to 99 minutes can be specified.
 - For a 60-minute tape press 6 and 0.
 - ◀◀ or ▶▶ on the Compact Disc Player or on the remote control can also be used to specify tape length.
- 5 Press the numbered buttons on the remote control to select the first track to be recorded.
 - To select the 25th track, press +10, +10 and 5.
 - To select the 20th track, press +10, +10 and 0.

- 6 Repeat step 5 to select the rest of the tracks for side A.

The remaining recording time of side A is displayed. You cannot select a track with a longer playing time.

- 7 Hold down SHIFT and press CD EDIT/CHECK on the remote control to switch to side B and select the tracks for the side.

- 8 Press REC to start recording.

The tape is rewound to the beginning of the side facing upward, the lead segment is played through for 10 seconds, and recording starts.

When recording on the side facing upward (side A) ends, recording on the opposite side (side B) starts.

To stop recording

Press ■ on the Stereo Cassette Deck or on the remote control. Recording and CD play stop simultaneously.

To check the program

- 1 Before recording, hold down SHIFT and press CD EDIT/CHECK on the remote control to select side A or B.
- 2 Press ◀◀ or ▶▶ on the Compact Disc Player or on the remote control repeatedly. The track number and program number are displayed in succession.

To change the program of each side

Hold down SHIFT and press CD EDIT/CHECK on the remote control to select side A or B, and press ■ to clear the program for the selected side. Then, select tracks again.

To clear the edit program

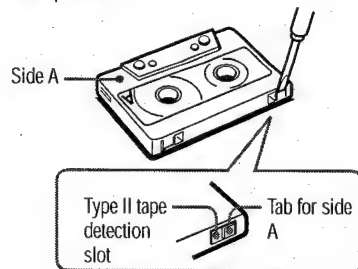
Press ■ on the Stereo Cassette Deck or on the remote control twice.

Tip:

If squealing or beating sounds occur when recording MW or LW broadcast, hold down SHIFT and press TUNER MONO on the remote control to display "BEAT 1" or "BEAT 2", so as to eliminate the noise.

To prevent accidental erasure

Break off the plastic tab of the cassette tape with a screwdriver or other pointed tool.



To record on the tape again, cover the tab openings with adhesive tape. (On type II tapes, take care not to cover the type II tape detection slot.)

MD RECORDING (with the optional Mini Disc Recorder)

WHAT IS A MINI DISC (MD)?

An MD is only 64 mm in diameter, about half the size of a conventional CD. Unlike a CD, an MD comes in a plastic cartridge, so that it can be handled with ease. The cartridge also protects the disc inside from shocks, dust and scratches. Unlike cassette tapes, which can become stretched or tangled, an MD is an excellent durable media.

TYPES OF MDS

There are two types of MDs: "Optical discs" and "Magneto-optical discs". Both types use laser beams and optical pick-up technology to read recorded data during playback.

Optical discs

These are playback only discs. Like CDs, they are used as prerecorded music discs. You cannot record or edit them.



The shutter covers the opening only on the non-labeled side of the MD.

Recordable MO** discs

These are recordable discs which can be recorded on again and again, like cassette tapes. The recording method called magneto-optical technology employs a laser and magnetism to record signals. Therefore, the quality of recorded sound does not deteriorate even after many playbacks and recordings.



The shutter covers the opening on both sides of the MD.

**MO: Magneto Optical

Ultra compact size made possible by ATRAC** technology

A digital audio compression technology called the ATRAC system automatically extracts only the frequencies that are actually audible to the human ear and cuts the frequencies which are inaudible. This compresses the amount of data to be recorded to 1/5 of the normal amount. The ATRAC system is based upon studies carried out in the field of auditory psychology and does not impair the quality of the audible sound.

This system supports a newly developed ATRAC3 system, whose compression rate is much higher than that of the conventional ATRAC system.

**ATRAC: Adaptive TRansform Acoustic Coding

Quick random access

One of the great features of the MD is that you can search for desired tracks quickly. There are also quick and easy functions for random-playback, in which the order of the tracks can be rearranged at random, and for renumbering tracks enabling them to be played in any order.

THE LIMITATIONS OF MD

Recording on the MD is performed differently from that of a cassette tape or a DAT. Therefore, the MD system is subject to the following restrictions.

"TOC* FULL" is displayed even if the recording time does not reach the maximum recordable time of the disc

"TOC* FULL" is displayed when 254 tracks are already recorded on a disc, without respect to the recording time.

* TOC: Table Of Contents

"TOC* FULL" is displayed even if a disc is not fully recorded on

If there are lots of emphasis data in a particular track, the unit handles the data as index codes, and tracks are counted, in addition, without respect to the time and number of tracks.

The remaining time on a disc is not increased even after some short tracks have been erased

When the remaining time on a disc is displayed, it may not be increased even after erasing short tracks because the sections less than eight seconds are not counted.

Certain tracks cannot be joined (the COMBINE function does not function)

- Tracks created by editing may not be joined.
- It is not possible to combine a track recorded in different recording modes (monaural, standard-stereo, LP2 and LP4).

The total of the recorded time and the remaining time on a disc does not match the maximum recordable time of the disc

Recording is performed in a minimum unit of one cluster (two seconds). Even if the recorded section is shorter than two seconds, a two-second space is needed in recording. Therefore, the available time becomes shorter.

Track numbers may not be registered properly

When recording from a CD with CD ► MD (NORMAL/HIGH), small tracks may be created depending on the contents of a CD.

When using the AUTO MARK function, track numbers may not be registered properly depending on the contents of the CD.

Connection

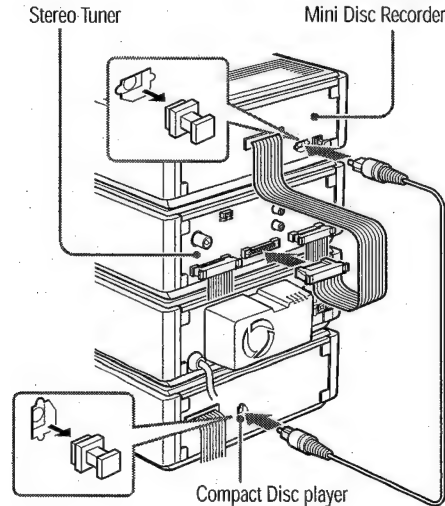
En

Caution

Before connecting the Mini Disc Recorder, disconnect the AC power cord from the AC power socket.

After making connection, re-connect the AC power cord.

- 1 Connect the Mini Disc Recorder's flat cable to the FROM MD terminal on the Stereo Tuner.
- 2 Connect the Mini Disc Recorder's CD DIGITAL IN jack and the Compact Disc Player's DIGITAL OUT jack using the optical cable supplied with the Mini Disc Recorder.



Stereo long-time recording (MDLP)

This system supports MDLP, and allows you to record twice or four times longer than the normal length on an MD in stereo.

Available recording modes

Stereo mode: standard length stereo recording (the usable length is the same as the time printed on the MD)

LP2 mode: two times longer stereo recording (the usable length is twice the time printed on the MD)

LP4 mode: four times longer stereo recording (the usable length is four times the time printed on the MD)

Monaural mode: recording is made in monaural, but twice as long as the time printed on the MD can be obtained.

Tip:

An MD can contain tracks recorded in different recording modes.

Notes

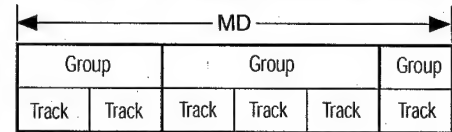
- It is not possible to combine two tracks recorded in different recording modes.
- Tracks recorded in LP2 or LP4 mode cannot be played on equipment which does not support MDLP. If a track recorded in LP2 or LP4 is played on such equipment, "LP:" is displayed as the track title and no sound is heard.

Double-speed recording

When performing digital recording from a CD onto an MD, double-speed recording is available as well as normal-speed recording.

Grouping tracks

This system allows you to gather tracks on an MD in groups.



Thus, for example, if you record several CDs onto an MD using LP2 or LP4 mode, you may create groups, each one of them corresponds to each CD.

Creating groups

You can create groups in either one of the following ways:

Auto grouping: When recording from CD to MD, a group corresponding to the recorded CD is automatically created. When recording from other sources, contents from the beginning to the end of a recording session make a group.

Manual grouping: With manual grouping, a group having no tracks is created. You can move tracks to the group later manually.

When playing

There are two modes available:

Disc mode: When the system is set to the disc mode, it plays all the tracks within the disc.

For example, when play starts from the first track in the first group, it continues to the last track in the last group.

Group mode: When the system is set to the group mode, you can specify a group in the disc to be played.

For example, if the 3rd group is selected and play is started, play begins with the first track in the 3rd group and ends with the last track in the 3rd group.

The above difference between the two modes is applicable also to search, skip, repeat and random play modes.

Note

You can create a maximum of 99 groups on an MD.

About the index mark

The system registers index marks while recording on an MD. Index marks allow you to easily locate the desired tracks.

When recording from a CD

- When recording with CD ► MD NORMAL or HIGH, the index mark information recorded on the CD is copied as it is.
- When recording with MD EDIT/REC, an index mark is registered automatically when a sound signal is input after a blank section lasting more than 3 seconds.

When recording from a tape* or connected equipment

An index mark is registered automatically when a sound signal is input after a blank section lasting more than 3 seconds.

* Available only when the FX-LM918 optional Stereo Cassette Deck is connected.

When recording from the radio

An index mark is registered automatically at an interval of 5 minutes.

Note

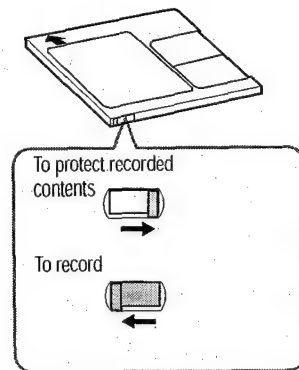
There may be a case where index marks are not registered accurately.

Manual mark function

Regardless of the source to be recorded and the button used to start MD recording, you can record index mark information anytime you want by pressing ENTER/ILLUMINATION.

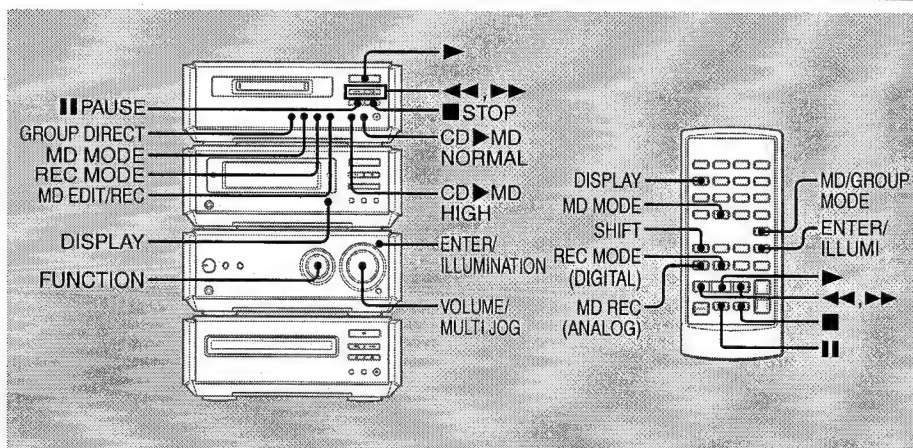
To prevent accidental erasure of recorded material

Slide the record-protect tab as shown below.
Slide the tab so that it is completely locked.



If a recording is attempted when the tab is set to the protected position, "Protected" appears on the display. Move the protect tab to the original position.

En

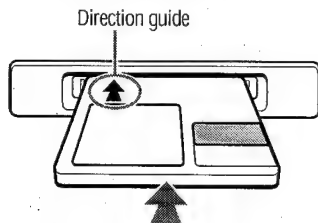


Digital recording

Synchronized digital recording of a CD onto an MD can be done either at normal or double speed.

1 Insert a recordable MD.

Insert a disc fully into the disc insertion slot with the label side up and in the direction of the arrow.



2 Turn FUNCTION to select the CD function and insert a CD to be recorded.

3 Press MD MODE (or hold down SHIFT and press MD MODE on the remote control).

"Auto GROUP?" is displayed.

4 Within 8 seconds, press ENTER/ILLUMINATION (or ENTER/ILLUMI on the remote control).

5 Turn VOLUME/MULTI JOG to turn the auto grouping mode on or off.

"Auto GRP ON": turns on the auto grouping mode. A group corresponding to the CD will automatically be created.
 "Auto GRPoFF": turns off the auto grouping mode. No group will be created.

6 Press ENTER/ILLUMINATION (ENTER/ILLUMI).

7 Press REC MODE repeatedly to select the recording mode.

"RecSTEREO": standard length stereo recording mode

"Rec LP2": two times longer stereo recording

"Rec LP4": four times longer stereo recording

8 To record at normal speed, press CD > MD NORMAL.

The selected recording mode and "CD > MDdirect" are displayed.

To record at double speed, press CD > MD HIGH. The selected recording mode followed by "x2" and "CD > MDdirect" are displayed.

9 Press PAUSE to start recording.

Recording stops automatically when the last track on the CD finishes playing.

When recording stops, "WRITING" is displayed and the contents (TOC) of the recording are recorded on the MD.

When the auto grouping mode is turned off at step 5, the recorded tracks belong to no group, since no group has been created.

To stop recording

Press PAUSE.

To stop play of the CD, press STOP again.

Note

While "WRITING" is displayed, do not disconnect the AC cord or give a strong shock to the system. Otherwise, the recorded contents on a disc will not be able to be played.

To start recording with the remote control

After performing steps 1 to 6 on page 24, instead of performing steps 7 to 9, proceed as follows:

- 1 Press **CD** to select the CD function.
- 2 Press **REC MODE (DIGITAL)** repeatedly to select the recording mode and speed.
"RecSTEREO": standard length stereo recording mode at normal speed
"RecSTEREOx2": standard length stereo recording at double speed
"Rec LP2": two times longer stereo recording at normal speed
"Rec LP2x2": two times longer stereo recording at double speed
"Rec LP4": four times longer stereo recording at normal speed
"Rec LP4x2": four times longer stereo recording at double speed
- 3 Press **III**.
- 4 Press **II** again to start recording.

To change the display

Press **DISPLAY** (or hold down **SHIFT** and press **DISPLAY** on the remote control). The display changes as follows:

- 1 Track number and elapsed playing time of CD
(Example: CD 1Tr 1:23)
- 2 Remaining playback time of CD
(Example: CD -48:07)
- 3 Remaining recordable time on MD
(Example: MD -52:33)
- 4 Track number and elapsed playing time of MD
(Example: MD 10Tr 1:25)

When "LONG CD" is displayed

The remaining recordable time on the MD is shorter than the total playing time of the CD.

Replace the MD with another one. If you press **CD ► MD** **NORMAL** or **HIGH**, recording will be made up to the limit of the recordable time on the MD.

To record on a previously recorded MD

If there is an unrecorded section left on the MD, the new recording automatically starts from where the previous recording finished.

If you want to start recording from the beginning of a previously recorded MD, erase the previous recording completely (see "Erasing all the tracks on a disc" on page 37).

If "WaitXXmin" is displayed when trying to record at double speed

Your desired CD has already been recorded at double speed starting within the last 74 minutes. Double speed recording of this CD is disabled by the copy-protect feature (see "Copy-protect features" on page 28) until the disabled time has passed.

Notes

- During digital recording at normal or double speed, **II** cannot be used.
- Recording from a CD-R/RW to an MD may be prohibited by the SCMS standard (see "Copy-protect features" on page 28). In this case, recording immediately stops after you started MD recording. Some very short tracks are added on an MD, so erase them as described in "Erasing a single track" on page 37.
- In rare cases, double speed recording of a CD-R/RW disc may not be made properly depending on the recording condition of the CD-R/RW disc. In this case, record at normal speed.
- Another double speed recording of the same CD cannot be performed during 74 minutes after the preceding double speed recording has been started.

En

Analogue recording

Recording through analogue inputs from the tuner, cassette tape*, CD, or external equipment connected to the AUX IN jacks or AUX DIGITAL IN jack can be made easily.

Also you can select monaural recording.

* Available only when the FX-LM918 optional Stereo Cassette Deck is connected.

- 1 Insert a recordable MD.
- 2 Turn FUNCTION to select the source to be recorded.
- 3 Prepare the source to be recorded.
To record a radio broadcast, tune in a desired station.
To record from a CD, insert the disc.
To record from a tape, insert the tape.
To record from connected equipment, prepare the equipment for playback.
- 4 Press MD MODE (or hold down SHIFT and press MD MODE on the remote control).
 "Auto GROUP?" is displayed.
- 5 Within 8 seconds, press ENTER/ILLUMINATION (or ENTER/ILLUMI on the remote control).
- 6 Turn VOLUME/MULTI JOG to turn the auto grouping mode on or off.
 "Auto GRP ON": turns on the auto grouping mode. Contents from the beginning to the end of the recording session will make a group.
 "Auto GRPoFF": turns off the auto grouping mode. No group will be created.

- 7 Press ENTER/ILLUMINATION (ENTER/ILLUMI).
- 8 Press REC MODE (or MD REC (ANALOG) on the remote control) repeatedly to select the recording mode.
 "RecSTEREO": standard length stereo recording mode
 "Rec LP2": two times longer stereo recording
 "Rec LP4": four times longer stereo recording
 "Rec MONO": monaural recording
- 9 Press MD MODE twice (or hold down SHIFT and press MD MODE twice on the remote control).
 "Mark MODE ?" is displayed.
- 10 Within 8 seconds, press ENTER/ILLUMINATION (ENTER/ILLUMI).
- 11 Turn VOLUME/MULTI JOG to select an index mark mode.
To register index marks automatically at the beginning of each track, select "Mark: AUTO ?".
To register index marks every 5 minutes, select "Mark: TIME ?".
To record without registering index marks automatically, select "Mark: OFF ?".
- 12 Press ENTER/ILLUMINATION (ENTER/ILLUMI).
- 13 Press MD EDIT/REC.
 The selected recording mode and "MD REC" are displayed.
- 14 Press ■ to start recording.
 When recording from connected equipment, start playback of the connected equipment.

To stop recording

Press ■.

To add index marks during recording

Press ENTER/ILLUMINATION (ENTER/ILLUMI).

Tips:

- Using the monaural recording mode, you can record twice as long as the time printed on the MD.
- When recording from a CD to an MD is made using analogue recording, CD digital signals are once converted to analogue signals, and the converted signals are recorded on an MD in digital form.

Creating a group only

You can create a new group. Thus a group containing no tracks is created on an MD.

You can move tracks to this group later manually.

- 1 Insert a recordable MD.
- 2 Turn FUNCTION to select the MD function.
- 3 Press MD MODE twice (or hold down SHIFT and press MD MODE twice on the remote control).
"GroupTitle?" is displayed.
- 4 Within 8 seconds, press ENTER/ILLUMINATION (or ENTER/ILLUMI on the remote control).
"NEW ENTRY?" is displayed.
- 5 Within 8 seconds, press ENTER/ILLUMINATION (ENTER/ILLUMI).
- 6 Press MD MODE (hold down SHIFT and press MD MODE) to select the kind of character.
"A>": capital letters
"a>": small letters
"O>": numbers and symbols
* "a>" is not displayed with the remote control. Display "A>" to enter either capital letters or small letters.
- 7 Enter characters.
Turn VOLUME/MULTI JOG to select the desired character, then press ►►.
On the remote control, press the character buttons (see page 33) several times to select a desired character, then press ►►.
When ►► is pressed, the selected character moves one column to the left.

- 8 Repeat steps 6 and 7 to enter all the required characters (up to 50 characters).

- 9 Press ENTER/ILLUMINATION (ENTER/ILLUMI).

Editing characters while in entry mode

• To change a character during entering

Press ◀◀ or ▶▶ repeatedly until the character to be changed flashes. Then enter the desired character again.

• To delete characters

Press ◀◀ or ▶▶ repeatedly until the character to be deleted flashes. Then press ■■.

• To insert a space between the characters

Press ◀◀ or ▶▶ repeatedly until the part to be entered as a space flashes. Then press ►.

Note

Titles created by this system may not be displayed correctly when a disc is played on other equipment.

Recording tracks into an existing group

You can record tracks to an already existing group.
This function is available only for analogue recording.

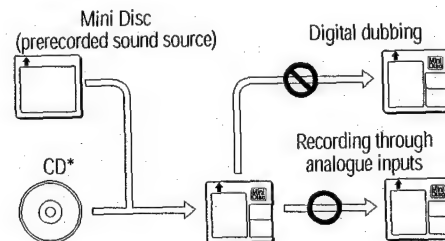
- 1 Insert a recordable MD.
- 2 Turn FUNCTION to select the source to be recorded.
- 3 Prepare the source to be recorded.
 To record a radio broadcast, tune in a desired station.
 To record from a CD, insert the disc.
 To record from a tape, insert the tape.
 To record from connected equipment, prepare the equipment for playback.
- 4 Press REC MODE (or MD REC (ANALOG) on the remote control) repeatedly to select the recording mode.
 "RecSTEREO": standard length stereo recording mode
 "Rec LP2": two times longer stereo recording
 "Rec LP4": four times longer stereo recording
 "Rec MONO": monaural recording
- 5 Press MD MODE twice (or hold down SHIFT and press MD MODE twice on the remote control).
 "Mark MODE ?" is displayed.
- 6 Within 8 seconds, press ENTER/ILLUMINATION (ENTER/ILLUMI).
- 7 Turn VOLUME/MULTI JOG to select an index mark mode.
 To register index marks automatically at the beginning of each track, select "Mark: AUTO ?".
 To register index marks every 5 minutes, select "Mark: TIME ?".
 To record without registering index marks automatically, select "Mark: OFF ?".
- 8 Press ENTER/ILLUMINATION (ENTER/ILLUMI).
- 9 Press GROUP DIRECT (or GROUP (DIRECT) on the remote control).
 "IGrp ADD?" is displayed.
- 10 Turn VOLUME/MULTI JOG to select the group to which new recordings are to be added.
- 11 Press MD EDIT/REC.
- 12 Press **II** to start recording.

Copy-protect features

SCMS

When digital recording is attempted from recorded material with copyrights, digital dubbing cannot be performed to a recordable MD from another MD recorded in digital because of the built-in record restriction function which complies with the SCMS* standard.

* SCMS (Serial Copy Management System) is the standard to restrict single digital dubbing between digital audio systems thus protecting copyrights.



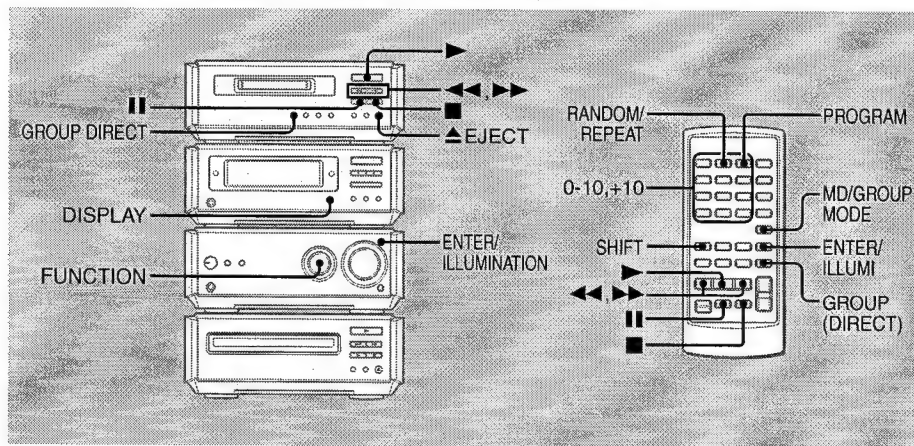
* Recording from a digitally recorded CD-R/RW to an MD is not possible.

Double speed recording

To protect copyrighted material against abusive digital copying, this system prohibits continuous double speed recordings of any given CD. Once a double speed recording is started, the same CD cannot be recorded at double speed again for the next 74 minutes.

This applies even if the recording has been stopped in the middle.

MD PLAY (with the optional Mini Disc Recorder)



Switching between the disc mode and the group mode

When you turn on the system and select the MD function, the disc mode is selected.

In the disc mode, the display is like the following when an MD is inserted.

MD 26Tr82:37

The display shows the total number of the tracks recorded and the total playing time.

To switch from the disc mode to the group mode, press and hold **■** on the Mini Disc Recorder until "GRP" appears.

Alternatively, press MD/GROUP MODE on the remote control. The display becomes like the following:

4G26Tr82:37

The display shows the total number of the groups, total number of the tracks and the total playing time.

To return to the disc mode, press and hold **■** until "GRP" goes off. (Or press MD/GROUP MODE on the remote control so that "GRP" goes off.)

Selecting a group in the group mode

In the group mode, proceed as follows to select a desired group:

- 1 Press GROUP DIRECT (or GROUP (DIRECT) on the remote control). "GRP" flashes.
- 2 While "GRP" flashes, press **◀◀** or **▶▶** (or numbered buttons on the remote control) to select a group.

For example, when the group 1 is selected, the display is like the following:

1G 4Tr15:57

The group number, total number of the tracks in the group and total playing time are shown.

- 3 Press GROUP DIRECT (GROUP (DIRECT)). "GRP" lights steadily.

Playback

- 1 Turn FUNCTION on the Stereo Integrated Amplifier to select the MD function. Alternatively, press MD on the remote control.
- 2 Insert an MD.
- 3 To play the entire disc, select the disc mode.
To play a desired group, select the group mode, and then select the desired group.
- 4 Press **▶** to start play.

To stop playback

Press **■**.

To pause playback

Press **⏸**. Press again to resume playback.

To play at a double speed

During play, keep **▶▶** pressed for more than two seconds. To resume normal play, press **▶** again.

To eject a disc

Press **⏏**.
Do not hold the disc when ejecting the disc.

To skip to the beginning of the current/preceding/succeeding track

Press **◀◀** or **▶▶** repeatedly.

En

To skip to the beginning of the first track of the preceding/succeeding group while in group mode

During play, press GROUP DIRECT (GROUP (DIRECT)) so that "GRP" flashes. Then press ◀◀ or ▶▶ repeatedly.

To search (playback in fast forward or reverse)

Hold down ◀◀ or ▶▶. Release at the desired point.

To select a track with the remote control (Direct play)

Press the numbered buttons to select a track.

- To select the 25th track, press +10, +10 and 5.
- To select the 20th track, press +10, +10 and 0.

To select a track in another group while in the group mode, proceed as follows:

- 1 Press GROUP (DIRECT) so that "GRP" flashes.
- 2 Press the numbered buttons to select the desired group.
- 3 Press GROUP (DIRECT) so that "GRP" lights steadily.
- 4 Press the numbered buttons to select the desired track.

To display the disc title in stop mode

Press DISPLAY (hold down SHIFT and press DISPLAY on the remote control) in stop mode.

If the disc title is not registered, "No Title" is displayed.

To change the display in play mode

Press DISPLAY (hold down SHIFT and press DISPLAY on the remote control) during play.

Each press changes the display as follows:

In the disc mode

- 1 Track number being played and elapsed playing time
(Example: MD 1Tr 1:23)
- 2 Track title
(If the track title is not registered, the track number is displayed)
- 3 Group number and track number being played
(Example: 1Gp 1Tr)
- 4 Remaining time of the disc
(Example: MD -52:33)

In the group mode

- 1 Group number and track number being played, and elapsed playing time
(Example: 1G 1Tr 1:23)
- 2 Track title
(If the track title is not registered, the track number is displayed)
- 3 Group number and track number being played
(Example: 1Gp 1Tr)
- 4 Remaining time of the group
(Example: 1 -12:35)

Random/Repeat play

Random play mode plays all the tracks on the disc or within a group in random order. Repeat play mode plays all the tracks on the disc or within a group, or the track being played repeatedly.

You can select random and repeat all play at the same time.

Hold down SHIFT and press RANDOM/REPEAT repeatedly on the remote control.

Each time it is pressed, the function changes in the following order:

- 1 "↺1": Single track repeat
- 2 "↺": All tracks repeat
- 3 "RANDOM": Random play
- 4 "RANDOM" and "↺": Random/repeat play
- 5 Normal play

Programmed play

Plays back up to 30 selected tracks in programmed order.

In the disc mode

- 1 Hold down SHIFT and press PROGRAM on the remote control in stop mode.
"PRGM" flashes on the display.
- 2 Press the numbered buttons on the remote control to program a track.
-To select the 25th track, press +10, +10 and 5.
-To select the 20th track, press +10, +10 and 0.
The selected track number lights up on the display.
- 3 Repeat step 2 to program other tracks.
The total number of selected tracks and total playing time will be displayed.
- 4 Press ▶.
The track number for the current track flashes on the display.

In the group mode

- 1 Hold down SHIFT and press PROGRAM on the remote control in stop mode.
"PRGM" flashes on the display.
- 2 Press GROUP DIRECT (or GROUP (DIRECT) on the remote control).
- 3 Press the numbered buttons on the remote control to select a group.
-To select the 25th group, press +10, +10 and 5.
-To select the 20th group, press +10, +10 and 0.
The selected group number lights up on the display.
- 4 Press GROUP DIRECT (GROUP (DIRECT)).
- 5 Press the numbered buttons on the remote control to program a track.
-To select the 25th track, press +10, +10 and 5.
-To select the 20th track, press +10, +10 and 0.
The selected track number lights up on the display.
- 6 Program other tracks.
To program a track in the same group, repeat step 5.
To program a track in another group, repeat steps 2 to 5.
- 7 Press ► to start play.
 - During programmed play, you cannot
-select "◀1" play or random play.
-select a track with the numbered buttons.
 - If the total play time of the program exceeds 255 minutes and 59 seconds, the playing time is displayed as "- :- -".

To check the program

Press ◀◀ or ▶▶ repeatedly in stop mode. The track number and program number are displayed in succession.

To clear the program

Press ■ in stop mode.

To add tracks to the program

In the disc mode

Repeat step 2 on page 30 before starting play. The tracks are added to the end of the program.

In the group mode

To add a track in the same group as that of the last track, repeat step 5 on this page. To add a track in another group, repeat steps 2 to 5. The tracks are added to the end of the program.

To change the programmed tracks

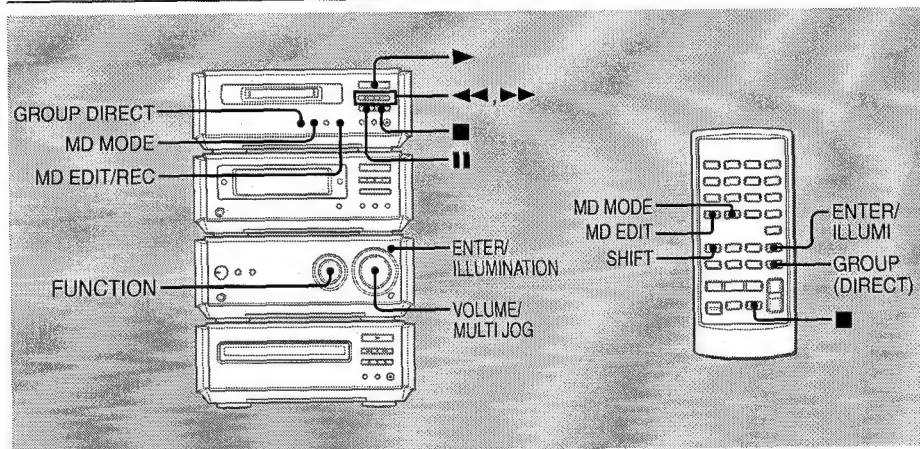
Clear the program and repeat all the steps again.

Notes on MDs

Nothing other than an MD should be inserted into the disc insertion slot. Otherwise the disc may become scratched, causing a malfunction or safety hazard such as an electric shock.

MD EDIT (with the optional Mini Disc Recorder)

En



Before editing

While "WRITING" is displayed, do not disconnect the AC cord or give a strong shock to the system. Otherwise, the edited contents on a disc will not be able to be played.

Note

A disc cannot be edited:

- when a prerecorded disc is inserted ("PB Disc" is displayed).
- when the record-protected tab on a loaded disc is moved to the protected position ("Protected" is displayed).
- during programmed play.

Registering the disc and track title

You can register the titles of the discs and tracks.

Personal messages also can be registered.

- 1 Turn FUNCTION to select the MD function and insert an MD.
- 2 To register a disc title: while in the disc mode, press MD MODE (or hold down SHIFT and press MD MODE on the remote control) to display "Disc Title?".
To register a track title: while either in the disc mode or group mode, select or play the track and press MD MODE (or hold down SHIFT and press MD MODE on the remote control) to display "XXTr Title?" (XX is a track number).
- 3 Within 8 seconds, press ENTER/ILLUMINATION (ENTER/ILLUMI).

- 4 Press MD MODE (hold down SHIFT and press MD MODE) to select the kind of character.

"A>": capital letters

"a>": small letters

"O>": numbers and symbols

* "a>" is not displayed with the remote control. Display

"A>" to enter either capital letters or small letters.

- 5 Enter characters.

Turn VOLUME/MULTI JOG to select the desired character, then press ►►.

On the remote control, press the character buttons (see page 33) several times to select a desired character, then press ►►.

When ►► is pressed, the selected character moves one column to the left.

- 6 Repeat steps 4 and 5 to enter all the required characters (up to 50 characters).

Note that the total number of characters that can be entered for one disc is approximately 1,600.

- 7 Press ENTER/ILLUMINATION (ENTER/ILLUMI).

Editing characters while in entry mode

• To change a character during entering

Press ◀◀ or ►► repeatedly until the character to be changed flashes. Then enter the desired character again.

• To delete characters

Press ◀◀ or ►► repeatedly until the character to be deleted flashes. Then press II.

• To insert a space between the characters

Press ◀◀ or ►► repeatedly until the part to be entered as a space flashes. Then press ►.

These characters can be used

Capital letters: (space), A to Z

Small letters: (space), a to z

Numbers and symbols: (space), 0 to 9, ! " # \$ % & ' () * + , - . / : ; < = > ? @ _

Notes

- If the system is left for 1 minute at steps 4 to 6, the character entry mode is cancelled.
- If you enter a track title while playing the track, play is repeated until the entering finishes.

Characters assigned to buttons on the remote control

To enter character with the remote control, select the kind of character, then press repeatedly the button to which the desired character is assigned until the desired character is displayed.

Button	Assigned characters	
	"A>"	"O>"
"1"	-	1
"2"	ABCabc	2
"3"	DEFdef	3
"4"	GHIghi	4
"5"	JKLjkl	5
"6"	MNOmno	6
"7"	PQRSpqrs	7
"8"	TUVtuv	8
"9"	WXYZwxyz	9
"0"	! " # \$ % & ' () * + , - . / : ; < = > ? @ _	0

Registering the group title

You can register the titles of the groups.

- 1 Turn FUNCTION to select the MD function and insert an MD.
- 2 While either in the disc mode or group mode, press MD MODE repeatedly (or hold down SHIFT and press MD MODE repeatedly on the remote control) to display "GroupTitle?".
- 3 Within 8 seconds, press ENTER/ILLUMINATION (ENTER/ILLUMI).
- 4 Within 8 seconds, turn VOLUME/MULTI JOG to select the group number you want to register a title.
- 5 Within 8 seconds, press ENTER/ILLUMINATION (ENTER/ILLUMI).
- 6 Press MD MODE (hold down SHIFT and press MD MODE) to select the kind of character.
"A>": capital letters
"a>": small letters
"O>": numbers and symbols
* "a>" is not displayed with the remote control. Display "A>" to enter either capital letters or small letters.
- 7 Enter characters.
Turn VOLUME/MULTI JOG to select the desired character, then press ►►.
On the remote control, press the character buttons (see this page) several times to select a desired character, then press ►►.
When ►► is pressed, the selected character moves one column to the left.

- 8 Repeat steps 6 and 7 to enter all the required characters (up to 50 characters).

Note that the total number of characters that can be entered for one disc is approximately 1,600.

- 9 Press ENTER/ILLUMINATION (ENTER/ILLUMI).

Editing characters while in entry mode

See page 32.

Note

If the system is left for 1 minute at steps 6 and 7, the character entry mode is cancelled.

Registering the group title during recording

When performing recording while creating a group (auto grouping mode on), group title can be registered during recording.

- 1 During recording, press MD MODE to display "GroupTitle?".
- 2 Within 8 seconds, press ENTER/ILLUMINATION.
- 3 Follow steps 6 to 9 in "Registering the group title".

Erasing a track title

You can erase a track title. If you erase a track title, "LP:", which was automatically registered as a track title when the track was recorded in LP2 or LP4 mode, will also be erased.

- 1 Select or play the track whose title you want to erase.
- 2 Press MD MODE twice to display "Erase Title".
- 3 Within 8 seconds, press ENTER/ILLUMINATION. "XXTr?" (XX is the track number) is displayed.
- 4 Press ENTER/ILLUMINATION again.

Note on disc/track/group title

When entering a disc or group title, do not use a character string such as "//xxx;" ("//BEATLES;", for example). If such character string is used, information concerning the group and track structure may not be recognized by the system correctly.

If MDs with groups are played on other equipment

If you play an MD on which you create groups on other equipment that does not support groups, a very long disc title will be displayed. This long title determines group and track structure on the disc. Therefore, if you modify this title, the disc's group and track structure will no longer be recognized by this system.

In this case, if you correct the disc title to conform to the rule (syntax), this system will be able to recognize the group and track structure. See page 44 for details.

Dividing a track

You can divide a track into two tracks by registering an index mark.

- 1 Turn FUNCTION to select the MD function and insert an MD.
- 2 During play of the track to be divided, press **II** at the point where you want to divide the track. The system enters the pause mode.
- 3 Press MD EDIT/REC (or hold down SHIFT and press MD EDIT on the remote control) to display "Divide X?" (X is the track number).
- 4 Within 8 seconds, press ENTER/ILLUMINATION (or ENTER/ILLUMI on the remote control). The Mini Disc Recorder plays repeatedly the 3 seconds after the point where you pressed **II**.
- 5 Adjust the point to be divided with **◀◀** or **▶▶**, or VOLUME/MULTI JOG, referring to the playback sound.
- 6 Within 1 minute, press ENTER/ILLUMINATION (ENTER/ILLUMI). An index mark is registered and the track number advances by one.
- 7 Remove the MD. "WRITING" is displayed and the data concerning the contents of the editing are registered.

Notes

- If the track had a title before the division, the title is assigned to the first half of the divided track.
- A track cannot be divided when the loaded disc already contains 254 tracks.

Dividing a group

You can divide a group into two groups, each containing a certain number of tracks.

- 1 Turn FUNCTION to select the MD function and insert an MD.
- 2 Select the group mode and select the group to be divided.
- 3 Press MD EDIT/REC (or hold down SHIFT and press MD EDIT on the remote control) to display "DivideGp X?" (X is the group number).
- 4 Within 8 seconds, press ENTER/ILLUMINATION (or ENTER/ILLUMI on the remote control).
- 5 Select the point to be divided with **◀◀** or **▶▶**, or VOLUME/MULTI JOG. For example, select track 5 to divide the group at the point between track 4 and 5.
- 6 Within 8 seconds, press ENTER/ILLUMINATION (ENTER/ILLUMI).
- 7 Remove the MD. "WRITING" is displayed and the data concerning the contents of the editing are registered.

Combining two tracks

You can combine two tracks by erasing the index mark in between.

- 1 Turn FUNCTION to select the MD function and insert an MD.
- 2 Select or play the latter track of the two tracks to be combined.
For example, to combine the 2nd and 3rd tracks, select or play the 3rd track.
- 3 Press MD EDIT/REC (or hold down SHIFT and press MD EDIT on the remote control) to display "Combine ?".
- 4 Within 8 seconds, press ENTER/ILLUMINATION (or ENTER/ILLUMI on the remote control).
A confirmation display such as "2 + 3" (when combining the 2nd and 3rd tracks) appears.
- 5 Within 1 minute, press ENTER/ILLUMINATION (ENTER/ILLUMI).
The two tracks are combined.
The track numbers from this point forward are decreased by 1.
- 6 Remove the MD.
"WRITING" is displayed and the data concerning the contents of the editing are registered.

NOTES

- If both of the tracks are titled, the title of the lower numbered track remains. If only one track is titled on the tracks to be combined, this title remains.
- If two tracks belonging to different groups (two consecutive groups) are combined, the combined track will belong to the lower numbered group.
- You cannot combine tracks recorded in different modes (standard stereo, LP2, LP4 and monaural).

Combining two groups

You can combine two groups.

- 1 Turn FUNCTION to select the MD function and insert an MD.
- 2 Select the group mode.
- 3 Select the latter group of the two groups to be combined.
For example, to combine the 2nd and 3rd groups, select the 3rd group.
- 4 Press MD EDIT/REC (or hold down SHIFT and press MD EDIT on the remote control) to display "Combine ?".
- 5 Within 8 seconds, press GROUP DIRECT (or GROUP (DIRECT) on the remote control) to display "Combine GP?".
- 6 Within 8 seconds, press ENTER/ILLUMINATION (or ENTER/ILLUMI on the remote control).
A confirmation display such as "GP 2 + 3" (when combining the 2nd and 3rd groups) appears.
- 7 Within 1 minute, press ENTER/ILLUMINATION (ENTER/ILLUMI).
The two groups are combined.
The group numbers from this point forward are decreased by 1.
- 8 Remove the MD.
"WRITING" is displayed and the data concerning the contents of the editing are registered.

Changing the order of the tracks

You can change the order of tracks after completing a recording. In the disc mode, you can move a track anywhere within the disc. In the group mode, you can move a track anywhere within the group.

- 1 Turn FUNCTION to select the MD function and insert an MD.
- 2 Select or play the track to be moved.
- 3 Press MD EDIT/REC repeatedly (or hold down SHIFT and press MD EDIT repeatedly on the remote control) to display "Move X?" (X is the track number).
- 4 Within 8 seconds, press ENTER/ILLUMINATION (or ENTER/ILLUMI on the remote control).
- 5 Within 8 seconds, turn VOLUME/MULTI JOG to select the desired track number to move the track to.
- 6 Within 8 seconds, press ENTER/ILLUMINATION (ENTER/ILLUMI).
- 7 Remove the MD.
"WRITING" is displayed and the data concerning the contents of the editing are registered.

En

Moving a track into a group

You can move a track which belongs to no group into a specified group.

- 1 Turn FUNCTION to select the MD function and insert an MD.
- 2 Select the disc mode, and select the track to be moved.
- 3 Press MD EDIT/REC repeatedly (or hold down SHIFT and press MD EDIT repeatedly on the remote control) to display "Move X?" (X is the track number).
- 4 Within 8 seconds, press ENTER/ILLUMINATION (or ENTER/ILLUMI on the remote control).
- 5 Within 8 seconds, press GROUP DIRECT (or GROUP (DIRECT) on the remote control). "X>? 1Gp" (X is the track number) is displayed.
- 6 Within 8 seconds, turn VOLUME/MULTI JOG to specify the group number you want to move the track to.
- 7 Within 8 seconds, press ENTER/ILLUMINATION (ENTER/ILLUMI).
The track is moved to the end of the specified group.
- 8 Remove the MD.
"WRITING" is displayed and the data concerning the contents of the editing are registered.

Removing a track from a group

You can remove a track from a group so that the track belongs to no group.

- 1 Turn FUNCTION to select the MD function and insert an MD.
- 2 Select the group mode, and select the track to be removed.
- 3 Press MD EDIT/REC repeatedly (or hold down SHIFT and press MD EDIT repeatedly on the remote control) to display "Move X?" (X is the track number).
- 4 Within 8 seconds, press ENTER/ILLUMINATION (or ENTER/ILLUMI on the remote control).
- 5 Within 8 seconds, press GROUP DIRECT (or GROUP (DIRECT) on the remote control). "X>? 0Gp" (X is the track number) is displayed.
- 6 Within 8 seconds, press ENTER/ILLUMINATION (ENTER/ILLUMI).
The track is removed from the group, but still exists at the position next to the group the track once belonged to.
- 7 Remove the MD.
"WRITING" is displayed and the data concerning the contents of the editing are registered.

Changing the order of the groups

You can change the order of groups after completing a recording.

- 1 Turn FUNCTION to select the MD function and insert an MD.
- 2 Select the group mode, and select the group to be moved.
- 3 Press MD EDIT/REC repeatedly (or hold down SHIFT and press MD EDIT repeatedly on the remote control) to display "Move X?".
- 4 Within 8 seconds, press GROUP DIRECT (or GROUP (DIRECT) on the remote control). "Move Gp X?" (X is the group number) is displayed.
- 5 Within 8 seconds, press ENTER/ILLUMINATION (or ENTER/ILLUMI on the remote control).
- 6 Within 1 minute, turn VOLUME/MULTI JOG to select the desired group number to move the group to.
- 7 Within 8 seconds, press ENTER/ILLUMINATION (ENTER/ILLUMI).
- 8 Remove the MD.
"WRITING" is displayed and the data concerning the contents of the editing are registered.

Erasing tracks/groups

You can erase a single track, a group, or all tracks on a disc.

Erasing a single track

- 1 Turn FUNCTION to select the MD function and insert an MD.
- 2 Select or play the track to be erased.
- 3 Press MD EDIT/REC repeatedly (or hold down SHIFT and press MD EDIT repeatedly on the remote control) to display "Erase X?" (X is the track number).
- 4 Within 8 seconds, press ENTER/ILLUMINATION (or ENTER/ILLUMI on the remote control).
"Erase? X?" is displayed.
To cancel, press ■.
- 5 Within 1 minute, press ENTER/ILLUMINATION (ENTER/ILLUMI).
The selected track is erased and all the succeeding track numbers are decreased by 1.
"WRITING" is displayed, then "Complete" is displayed.

Erasing a group

- 1 Turn FUNCTION to select the MD function and insert an MD.
- 2 Select the group mode, and select the group to be erased.
- 3 Press MD EDIT/REC repeatedly (or hold down SHIFT and press MD EDIT repeatedly on the remote control) to display "Erase X?".
- 4 Within 8 seconds, press GROUP DIRECT (or GROUP (DIRECT) on the remote control).
"Erase Gp X?" (X is the group number) is displayed.
- 5 Within 8 seconds, press ENTER/ILLUMINATION (or ENTER/ILLUMI on the remote control).
"Erase?Gp X?" is displayed.
To cancel, press ■.
- 6 Within 1 minute, press ENTER/ILLUMINATION (ENTER/ILLUMI).
The selected group is erased and all the succeeding group numbers are decreased by 1.
"WRITING" is displayed, then "Complete" is displayed.

Erasing all tracks on a disc

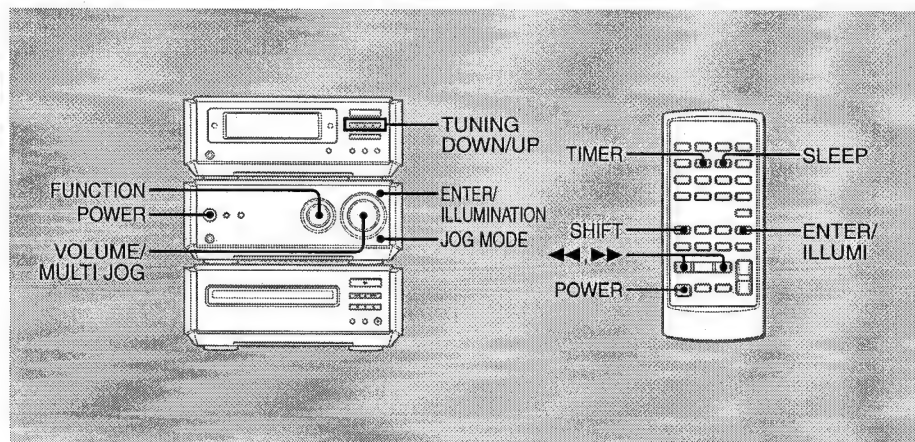
- 1 Turn FUNCTION to select the MD function and insert an MD.
- 2 Press MD EDIT/REC repeatedly (or hold down SHIFT and press MD EDIT repeatedly on the remote control) to display "Erase All?".
- 3 Within 8 seconds, press ENTER/ILLUMINATION (or ENTER/ILLUMI on the remote control).
"Erase?All?" is displayed.
To cancel, press ■.
- 4 Within 1 minute, press ENTER/ILLUMINATION (ENTER/ILLUMI).
"WRITING" is displayed, then "Complete" is displayed.

After completion of the erasure, "Blank Disc" is displayed.

En

TIMER OPERATIONS

En



Note

Timer playback of a tape and timer recording onto a tape can be performed only when the FX-LM918 optional Stereo Cassette Deck is connected.

Timer playback of an MD and timer recording onto an MD can be performed only when the AM-LM918 optional Mini Disc Recorder is connected.

Timer playback

The system can be turned on at a specified time every day with the built-in timer.

Make sure the clock is set correctly.

- 1 Press JOG MODE repeatedly so that "TIMER" is displayed, and within 6 seconds, turn VOLUME/MULTI JOG to select "TIMER \odot PLAY". Alternatively, hold down SHIFT and press TIMER on the remote control to select timer play.
- 2 Within 6 seconds, press ENTER/ILLUMINATION (or ENTER/ILLUMI on the remote control). Time and audio source display flash alternately.
- 3 Set the timer-on time. Turn VOLUME/MULTI JOG, press TUNING UP/DOWN or \lll/\ggg on the remote control.

- 4 Select a source.

Turn FUNCTION to select the desired source and press ENTER/ILLUMINATION (ENTER/ILLUMI).

- 5 Turn VOLUME/MULTI JOG, press TUNING UP/DOWN or \lll/\ggg on the remote control to set the timer-activated period, and press ENTER/ILLUMINATION (ENTER/ILLUMI).

The duration for the timer-activated period can be set between 5 and 320 minutes in 5-minutes steps.

- 6 Prepare the source.

To play CD or MD, insert a disc.

To play a tape, insert a tape.

To play the radio, select the band and tune in a station.

To play the connected equipment, set an external timer for the equipment so that its playback begins at the same time.

- 7 Press POWER to turn the system off after adjusting the volume and tone.

\odot remains on the display after the power is turned off. (Everything on the display will clear if the ECO mode is activated.)

When the timer-on time is reached, the system turns on and begins play with the selected source.

If the volume was set to higher than 21 when the power was turned off, it is automatically set to 21 when the system turns on by the timer.

Notes

- Timer play will not begin unless the power is turned off.
- Connected equipment cannot be turned on and off by the built-in timer of this system. Use an external timer.

Timer recording

Timer recording is available only for the tuner and connected equipment.

Make sure the clock is set correctly.

Preparation for timer recording

- To record from a radio broadcast, press BAND to select FM, MW or LW.
- To record from connected equipment, turn FUNCTION to select "AUX" or "D-IN".
AUX: for the equipment connected to the AUX IN jacks on the Stereo Tuner
D-IN: for the equipment connected to the AUX DIGITAL IN jack on the Mini Disc Recorder

It is possible to change the band and select a station, or re-select the connected equipment, that is, "AUX" or "D-IN", at step 7 below.

- 1 Press JOG MODE repeatedly so that "TIMER" is displayed, and within 6 seconds, turn VOLUME/MULTI JOG to select "TIMER \odot REC".
Alternatively, hold down SHIFT and press TIMER on the remote control to select timer recording.
- 2 Within 6 seconds, press ENTER/ILLUMINATION (or ENTER/ILLUMI on the remote control).
Time and audio source display flash alternately.
- 3 Set the timer-on time.
Turn VOLUME/MULTI JOG, press TUNING UP/DOWN or $\triangleleft/\triangleright$ on the remote control.

- 4 Select a source and a recording destination for timer recording.
Turn FUNCTION to select the source and destination, and press ENTER/ILLUMINATION (ENTER/ILLUMI).
The display will show one of the followings:
 - "FM (MW or LW)>MD": when recording from a radio broadcast onto an MD
 - "FM (MW or LW)>TP": when recording from a radio broadcast onto a tape
 - "AU (or DI)>MD": when recording from connected equipment onto an MD
 - "AU (or DI)>TP": when recording from connected equipment onto a tape
- 5 Turn VOLUME/MULTI JOG, press TUNING UP/DOWN or $\triangleleft/\triangleright$ on the remote control to set the timer-activated period, and press ENTER/ILLUMINATION (ENTER/ILLUMI).
The duration for the timer-activated period can be set between 5 and 320 minutes in 5-minutes steps.
The duration must be set so that it is equal to or less than the recordable length of the recording destination (tape or MD).
- 6 When recording onto an MD, turn VOLUME/MULTI JOG, press TUNING UP/DOWN or $\triangleleft/\triangleright$ on the remote control to select the recording mode, and press ENTER/ILLUMINATION (ENTER/ILLUMI).
 - "R-STEREO": for standard stereo recording
 - "R-LP2": for LP2 mode recording
 - "R-LP4": for LP4 mode recording
 - "R-MONO": for monaural recording

- 7 Prepare the source and the recording destination.
To record from the radio onto a tape or an MD, select the band and tune in a station and insert the tape or MD.
To record from the connected equipment onto a tape or an MD, set an external timer for the equipment so that its playback begins at the same time, then insert the tape or MD.

- 8 Press POWER to turn the system off after adjusting the volume and tone.
 \odot REC remains on the display after the power is turned off. (Everything on the display will clear if the ECO mode is activated.)

When the timer-on time is reached, the system turns on and begins recording with the selected source.

If the volume was set to higher than 21 when the power was turned off, it is automatically set to 21 when the system turns on by the timer.

However, when the ECO mode has been activated, sound will not be heard during timer recording.

Notes

- Timer recording will not begin unless the power is turned off.
- Connected equipment cannot be turned on and off by the built-in timer of this system. Use an external timer.

To check the specified time and source

Press JOG MODE again and display the timer mode you have selected, then press ENTER/ILLUMINATION (ENTER/ILLUMI). The selected source name, the timer-on time and the duration for the timer-activated period are displayed. Press JOG MODE repeatedly to return to the previous display.

To change the timer setting

Set the timer again from the beginning.

To cancel timer standby mode temporarily

Press JOG MODE to display the timer mode, then turn VOLUME/MULTI JOG to display "TIMER OFF". And then press ENTER/ILLUMINATION within 6 seconds.

Sleep timer

The system can be turned off automatically at a specified time.

- 1 Press JOG MODE repeatedly so that "SLEEP OFF" is displayed.
Alternatively, hold down SHIFT and press SLEEP on the remote control.
- 2 Within 6 seconds, turn VOLUME/MULTI JOG, press TUNING UP/DOWN or ◀◀/▶▶ on the remote control to set the sleep timer duration.
The sleep timer duration can be set between 5 and 320 minutes in 5-minutes steps.

To check the remaining time until the system turns off

Press JOG MODE repeatedly so that "SLEEP XX" (XX is the time until the power is turned off) is displayed. The remaining time is displayed for 6 seconds.

To cancel the sleep timer

Press JOG MODE repeatedly so that "SLEEP XX" is displayed. Then turn VOLUME/MULTI JOG or press TUNING UP/DOWN (or ◀◀/▶▶ on the remote control) to display "SLEEP OFF".

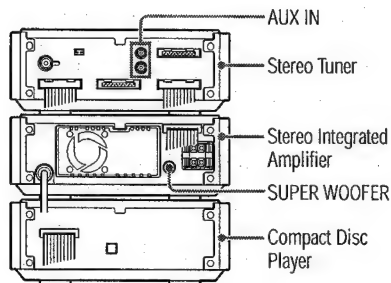
OTHER CONNECTIONS

Connecting audio/video equipment

The Stereo Tuner is equipped with the AUX IN jacks. The Stereo Integrated Amplifier is equipped with the SUPER WOOFER jack.

The AM-LM918 optional Mini Disc Recorder is equipped with the AUX DIGITAL IN jack.

These jacks allow you to connect commercially available audio/video equipment to the system.



Refer to the operating instructions of the connected equipment for details.

- The connecting cords are not supplied. Obtain the necessary connecting cords.
- Consult your local Aiwa dealer for optional equipment.

AUX IN jacks

Analogue sound signals can be input to the system through these jacks.

Use a cable with RCA phono plugs to connect audio equipment (turntables, LD players, VCRs, TV, etc.).

Connect the red plug to the R jack, and the white plug to the L jack.

When connecting a turntable

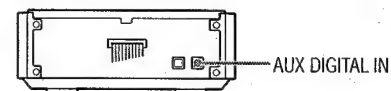
Use an Aiwa turntable equipped with a built-in equalizer amplifier.

SUPER WOOFER jack

Connect an optional powered sub woofer with a built-in amplifier to the jack.

AUX DIGITAL IN jack

Optional Mini Disc Recorder

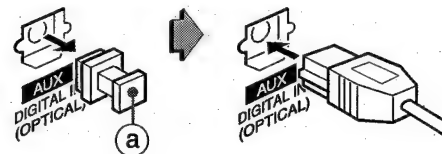


Digital sound signals can be input to the AM-LM918 optional Mini Disc Recorder through the AUX DIGITAL IN jack.

This system has a built-in sampling frequency rate converter, which converts the sampling frequency rates that are different from the MD sampling frequency rate (BS/CS tuner, DAT and other digital signals) into a sampling frequency rate that can be recorded on an MD.

Use an optical cable to connect digital audio source equipment (DAT deck, MD player, etc.).

Remove the dust cap (a) from the AUX DIGITAL IN jack. Then, connect an optical cable plug to the jack.



Note

The sound input via this jack may be cut off while an MD is being loaded or ejected.

En

REFERENCE

En

Care and maintenance

Occasional care and maintenance of the system and the software are needed to optimize the performance of your system.

To clean the cabinet

Use a soft and dry cloth. If the units' surfaces are extremely dirty, use a soft cloth lightly moistened with mild detergent solution. Do not use strong solvents such as alcohol, benzine or thinner.

To clean the tape heads

Dirty tape heads cause sound deterioration. After every 10 hours of use, clean the tape heads with a head cleaning cassette. Refer to the instructions of the cleaning cassette.

To demagnetize the tape heads

Use a demagnetizing cassette after every 20 to 30 hours of use. Refer to the instructions of the demagnetizing cassette.

Care of CDs

When a CD becomes dirty, wipe it from the centre out with a cleaning cloth. After playing a CD, store it in its case. Do not keep it in hot or humid places.

Care of tapes

Store tapes in their cases after use. Do not leave tapes near magnets, motors, television sets, or any source of magnetism. Do not expose tapes to direct sunlight, or leave them in a car parked in direct sunlight.

Care of MDs

Keep a cartridge in the attached case. Do not open the shutter of the cartridge to touch the disc directly. If the disc inside becomes soiled, it is very difficult to clean. The cartridge can also be damaged. Close the shutter if it opens while handling or ejecting a disc. Otherwise dust may enter or a disc may become scratched.

MD guide messages

Blank Disc

Nothing is recorded on the disc.

Can't Edit

- Tracks are too short to be joined.
- The combine function was used while playing back the first track.
- The divide function was used at the beginning of the track.
- The combine function was used to join tracks recorded in different modes.

Protected

The disc is record-protected. Slide the record-protect tab on the disc (see page 23).

Disc Error

- The disc is damaged by scratches. Replace the disc.
- The system received a strong shock during TOC reading. Do not subject the system to strong shock during TOC reading.

Disc Full

There is not enough time remaining on the disc to record. Replace the disc with another recordable disc.

Temp Over

- The temperature of the system is too high. Leave the system in a cool place for a while before operating it again.
- The surrounding temperature is too high or too low. Operate the system at moderate room temperature.

PB Disc

There is an attempt to record or edit a prerecorded music disc. Replace the disc with a recordable one.

TOC Full

There are too many tracks or emphasis data to be recorded or edited, or there is no room on the disc. Erase tracks to reduce tracks.

Mecha Err

Error occurs in the loading mechanism. (All functions concerning to MD will be disabled)
Turn the power off and disconnect the AC cord, and turn the system on again. If this message still appears, consult your local Aiwa dealer.

MD Error

Trouble occurs in the MD unit. Consult your Aiwa dealer.

UTOE Error

Error occurs due to a strong shock during recording, TOC edit or TOC reading. Replace the disc.

LONG CD

The playing time of CD to record is longer than the recordable remaining time of MD. (see page 25)

WaitXXmin (XX=number of minutes)

Double speed recording is prohibited within the last 74 minutes. Wait for the displayed number of minutes or record at normal speed (see page 25).

Troubleshooting

If your system fails to perform properly, check the following guide and the relevant sections of the Operating Instructions.

There is no sound

- Are the speakers and AC power cord connected properly?

The system shuts off suddenly

- Possibly a short circuit in the speaker terminals. Disconnect the AC power cord from the AC power socket and reconnect the speaker cords correctly.

Erroneous display

- Reset the system. (See "Resetting the system" on this page.)

Poor radio reception

- Check antenna connection. Adjust the antenna to find the best reception.
- Move the system and antenna away from other electric appliances and cords.

The tape does not run

- Is the deck in pause?

Poor tape sound

- Check for dirty heads. Clean them if needed.

Cannot record on a tape

- Is the erasure prevention tab of the tape broken off? If so, cover the tab opening with adhesive tape.

The CD player works poorly

- Is the disc correctly loaded?
- Is the disc dirty?
- Is the lens affected by condensation? If so, wait approximately one hour and try again.

MD recording is not possible

- Is CD ► MD (NORMAL/HIGH) pressed when attempting to record from a source other than CD?
- Is a prerecorded disc inserted? If so, change to a recordable one.
- Is the disc protected by the record-protect tab on the disc? (see page 23)

Resetting the system

If an unusual condition occurs in the display window or the cassette deck, reset the system as follows:

1 Press POWER to turn off the power.

If the power cannot be turned off, disconnect the AC power cord, then plug it in again.

2 Hold down CLEAR on the Stereo Tuner and press POWER. Everything stored in memory after purchase is cleared.

Syntax for group title

Syntax

o;disc title//track number1-track number2;group title1//track number3-track number4;group title2//track number5-track number6;group title3//...//

Description

- A group consists of consecutive tracks.
- Track numbers should be described in ascending order. For example, 1-4 and 5-7 are correct description, while 4-1 or 7-5 are incorrect.
- A track belonging to no group can exist.
- A track can belong to only one group.
- A group without a group title can exist.
- Same group title can be assigned to several groups within a disc.
- A maximum of 99 groups can be registered in a disc.
- For a group containing only one track, the hyphen should be omitted.

Example

0;Collections//1-7;Led Zeppelin"Presence"//8-17;Beatles//18-24;Rolling Stones//27-30;//31-38;1999-2000;My Favorites//39;Superstar//40-48;Carpenters Best//;Michael Jackson//

Disc title: Collections

Track 1 to track 7 : belong to the group titled Led Zeppelin"Presence"

Track 8 to track 17 : belong to the group titled Beatles

Track 18 to track 24 : belong to the group titled Rolling Stones

Track 25 to track 26 : belong to no group

Track 27 to track 30 : belong to the group with no title

Track 31 to track 38 : belong to the group titled 1999-2000;My Favorites

Track 39 : belongs to the group titled Superstar

Track 40 to track 48 : belong to the group titled Carpenters Best

Group titled Michael Jackson : contains no track

Specifications

STEREO TUNER TX-LM919

Tuner section

FM tuning range	87.5 MHz to 108 MHz
FM usable sensitivity (IHF)	16.8 dBf
FM antenna terminal	75 ohms (unbalanced)
MW tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)

MW usable sensitivity	350 μ V/m
LW tuning range	144 kHz to 290 kHz
LW usable sensitivity	1400 μ V/m
MW/LW antenna	Loop antenna

Input

AUX IN	500 mV
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General

Dimensions (W \times H \times D)	210 \times 82.5 \times 248 mm
Weight	1.1 kg

STEREO INTEGRATED AMPLIFIER MX-LM919

Amplifier section

Power output	Rated: 25 W + 25 W (6 ohms, T.H.D. 1%, 1 kHz/DIN 45500) Reference: 30 W + 30 W (6 ohms, T.H.D. 10%, 1 kHz/DIN 45324) DIN MUSIC POWER 72 W + 72 W
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Outputs

SUPER WOOFER	1.2 V
SPEAKERS	6 ohms or more
PHONES	47 kilohms or more

General

Power requirements	230 V AC, 50 Hz
Power consumption	85 W
Standby power consumption	1.7 W (ECO mode set to ON) 12 W (ECO mode set to OFF)
Dimensions (W \times H \times D)	210 \times 82.5 \times 286 mm
Weight	3.9 kg

COMPACT DISC PLAYER DX-LM918

Compact disc player section

Laser	Semiconductor laser ($\lambda = 780 \text{ nm}$)
D/A converter	1 bit dual
Signal-to-noise ratio	90 dB (1 kHz, 0 dB)
Harmonic distortion	1.05 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

Output

DIGITAL OUT

General

Dimensions (W × H × D)	210 × 82.5 × 243 mm
Weight	1.3 kg

STEREO CASSETTE DECK FX-LM918

Cassette deck section

Track format	4 tracks, 2 channels stereo
Frequency response	CrO ₂ tape : 50 Hz – 16000 Hz Normal tape : 50 Hz – 15000 Hz
Signal-to-noise ratio	60 dB (CrO ₂ tape peak level)
Recording system	AC bias
Heads	Recording/playback × 1, erase × 1

General

Dimensions (W × H × D)	210 × 82.5 × 238 mm
Weight	1.5 kg

MINI DISC RECORDER AM-LM918

MD recorder section

Scanning method	Non-contact optical scanner (Semiconductor laser application)
Recording system	Magnetic polarity modulation overwrite system
Rotation speed	Approx. 400 to 900 rpm (CLV)
Sampling frequency	44.1 kHz
No. of channels	Stereo: 2 channels Monaural: 1 channel
A/D, D/A converter	1-bit
Frequency	20 to 20000 Hz
Wow and flutter	Unmeasurable

Input

AUX DIGITAL IN	Sampling frequency: 48 kHz/44.1 kHz/32 kHz Optical input level: more than -21 dBm
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CD DIGITAL IN

General

Dimensions (W × H × D)	210 × 82.5 × 243 mm
Weight	1.3 kg

SPEAKER SYSTEM SX-LM918

Cabinet type	2 way, bass reflex (magnetic shielded type)
Speakers	Woofer: 130 mm cone type Tweeter: 25 mm dome type
Impedance	6 ohms
Dimensions (W × H × D)	166 × 324 × 232 mm
Weight	3.6 kg

Specifications and external appearance are subject to change without notice.

BBE

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NOTE

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The above information is only for Italy.

En

ADVARSEL!

Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laitteen käyttäminen muulla kuin tässä käyttöohjeessaa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än i denna bruksanvisning specificerats, kan användaren utsätta för osynlig laserstråling, som överskrider gränsen för laserklass 1.

OBSERVERA

Så länge som apparaten är ansluten till nätet flyter en svag ström genom densamma, även då den är avstängd. Om man under en längre tid ej har för avsikt att använda den, drag då ur nätkabeln.

BEMÆRK

Apparatet er stadig forbundet med lysnettet, så længe stikket er tilsluttet til stikkontakten, selv om afbryteren er slået fra. Hvis apparatet ikke bruges i længere tid, skal netledningen trækkes ud.

ADVARSEL!

Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Lever det brugte batteri tilbage til leverandøren.

ADVARSEL

Lithiumbatteri - Eksplosjonsfare. Ved utskifting benyttes kun batteri som anbefalt av apparatfabrikanten. Brukt batteri returneres apparatleverandøren.

VARNING

Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparatillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

VAROITUS

Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

AIWA CO.,LTD.